

# 3(8/7/000)

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form
<ul> <li>I am an examiner in Workgroup: Example: 1713</li> <li>Relevant prior art found, search results used as follows:</li> </ul>
<ul> <li>102 rejection</li> <li>103 rejection</li> <li>Cited as being of interest.</li> <li>Helped examiner better understand the invention.</li> <li>Helped examiner better understand the state of the art in their technology.</li> </ul>
Types of relevant prior art found:  [ Foreign Patent(s)  [ Non-Patent Literature  [ journal articles, conference proceedings, new product announcements etc.)
<ul> <li>Relevant prior art not found:</li> <li>Results verified the lack of relevant prior art (helped determine patentability).</li> <li>Results were not useful in determining patentability or understanding the invention.</li> </ul>
Comments:

Dropontor send completed forms to EIC1700 REMSEN 4B28





## SEARCH REQUEST FORM

## ·Scientific and Technical Information Center

Requester's Full Name: Phone Name Box and Bldg/Room Location	Number 30 3/1/- 150	i Seriai Nur	15063 Date: 13/3/04 nber: 10/692535 erred (circle): PAPER DISK E-MAII
If more than one search is subm	itted, please priorit	ize searches in o	order of need. ***********
Please provide a detailed statement of the Include the elected species or structures. k utility of the invention. Define any terms known. Please attach a copy of the cover statement o	search topic, and describe eywords, synonyms, acro that may have a special n	e as specifically as po onyms, and registry n neaning. Give examp	essible the subject matter to be searched.  umbers, and combine with the concept or
Title of Invention: Rob Si	mes AHICINE	ί	
Inventors (please provide full names):		•	
Earliest Priority Filing Date:			
appropriate serial number.			nal, or issued patent numbers) along with the
Phase search for Hank you.	a crupt of a	zrinulas	I > VI (a Hactural)
HLANK YEL.			
.,			
	•		
•			<i>f</i>
			`.
	`		•
		·	
			•
			,,,
STAFF USE ONLY	Type of Search		rs and cost where applicable
Searcher: K. Fuller	NA Sequence (#)	•	
Searcher Phone #:	AA Sequence (#)	•	
Searcher Location:	Structure (#) 14		
Date Searcher Picked Up:	Bibliographic	Dr.Link	
Date Completed: 12/20/04	Litigation	Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext	_ Sequence Systems _	•
Clerical Prep Time:	Patent Family	www/lhternet	·
Online Time: 75	Other	Other (specify)	

### WALKE 10/806451 12/20/04 Page 1

### => FILE REG

FILE 'REGISTRY' ENTERED AT 17:17:11 ON 20 DEC 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 DEC 2004 HIGHEST RN 799762-98-4 DICTIONARY FILE UPDATES: 19 DEC 2004 HIGHEST RN 799762-98-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

### => FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 17:17:15 ON 20 DEC 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 20 Dec 2004 VOL 141 ISS 26 FILE LAST UPDATED: 19 Dec 2004 (20041219/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L3 1 SEA FILE=REGISTRY ABB=ON "TRICRESYL PHOSPHATE"/CN L4 1 SEA FILE=REGISTRY ABB=ON "DIBUTYL SEBACATE"/CN L5 5360 SEA FILE=HCAPLUS ABB=ON L3 OR L4 L7 572 SEA FILE=HCAPLUS ABB=ON L5 AND DISPERS? L8 164 SEA FILE=HCAPLUS ABB=ON L7 AND PHOTOG?/SC,SX	L
L5 5360 SEA FILE=HCAPLUS ABB=ON L3 OR L4 L7 572 SEA FILE=HCAPLUS ABB=ON L5 AND DISPERS?	
L5 5360 SEA FILE=HCAPLUS ABB=ON L3 OR L4 L7 572 SEA FILE=HCAPLUS ABB=ON L5 AND DISPERS?	
L5 5360 SEA FILE=HCAPLUS ABB=ON L3 OR L4 L7 572 SEA FILE=HCAPLUS ABB=ON L5 AND DISPERS?	
I.8 164 SEA FILE=HCAPLUS ABR=ON I.7 AND PHOTOG2/SC.SX	
20 201 221 1222 1011 200 122 011 27 1110 1101001, 20701	
L10 95 SEA FILE=HCAPLUS ABB=ON L8 AND (AQ OR AQUEOUS? OR WATER? OR	
н20)	
L11 10 SEA FILE=HCAPLUS ABB=ON L8 AND (AQ OR AQUEOUS? OR WATER? OR	
H2O) (3A) PHASE?	
L12 38 SEA FILE=HCAPLUS ABB=ON L10 AND (ORG?(2A)(PHASE# OR SOLVENT#))	

```
L15
              O SEA FILE=HCAPLUS ABB=ON L8 AND (MW OR MOLE?(2A)WEIGHT?)
                                        L8 AND 150
L16
             18 SEA FILE=HCAPLUS ABB=ON
L18
             O SEA FILE=HCAPLUS ABB=ON
                                         L8 AND 150(1W)C
L19
            146 SEA FILE=HCAPLUS ABB=ON
                                         L7 AND PHOTOG?/SC
             42 SEA FILE=HCAPLUS ABB=ON
L20
                                         (L11 OR L12 OR L16) AND L19
L24
             42 SEA FILE=HCAPLUS ABB=ON
                                         L18 OR L20
                                         L19 AND COUPLER?
L25
             61 SEA FILE=HCAPLUS ABB=ON
                                         L25 AND (AQ OR AQUEOUS? OR WATER? OR
L26
              3 SEA FILE=HCAPLUS ABB=ON
                H2O) (3A) PHASE?
L27
             42 SEA FILE=HCAPLUS ABB=ON L24 OR L26 OR L15
L28
              1 SEA FILE=REGISTRY ABB=ON
                                          "N, N-DIETHYLBUTYRAMIDE"/CN
L29
              1 SEA FILE=REGISTRY ABB=ON
                                          "N, N-DIETHYL-M-TOLUAMIDE"/CN
L30
              1 SEA FILE=REGISTRY ABB=ON
                                          N-BUTYLACETANILIDE/CN
             1 SEA FILE=REGISTRY ABB=ON
L31
                                          N-METHYLPYRROLIDONE/CN
                                          "TRIMETHYL PHOSPHATE"/CN
L32
             1 SEA FILE=REGISTRY ABB=ON
                                          "TRIETHYL PHOSPHATE"/CN
L33
             1 SEA FILE=REGISTRY ABB=ON
L34
             1 SEA FILE=REGISTRY ABB=ON
                                          "TRIMETHYLPHOSPHINE OXIDE"/CN
                                          "DIMETHYL SULFOXIDE"/CN
L35
             1 SEA FILE=REGISTRY ABB=ON
L36
             1 SEA FILE=REGISTRY ABB=ON
                                          TETRAMETHYLUREA/CN
                                          "1,3-DIMETHYL-1,3-DIPHENYLUREA"/CN
L37
             1 SEA FILE=REGISTRY ABB=ON
L38
             1 SEA FILE=REGISTRY ABB=ON
                                          CYCLOHEXANONE/CN
L39
              1 SEA FILE=REGISTRY ABB=ON
                                         CYCLOPENTANONE/CN
L40
             12 SEA FILE=REGISTRY ABB=ON
                                          (L28 OR L29 OR L30 OR L31 OR L32 OR
                L33 OR L34 OR L35 OR L36 OR L37 OR L38 OR L39)
          71010 SEA FILE=HCAPLUS ABB=ON L40
L41
L42
              2 SEA FILE=HCAPLUS ABB=ON L41 AND L19
              2 SEA FILE=HCAPLUS ABB=ON L41 AND L8
L43
T.44
             42 SEA FILE=HCAPLUS ABB=ON L27 OR L42 OR L43
=> D L44 BIB ABS IND HITSTR 1-42
L44 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN
     2003:582626 HCAPLUS
ΔN
DN
     139:134885
ΨT
     Fused triazole compounds useful for colorants, their microparticle
```

TI Fused triazole compounds useful for colorants, their microparticle dispersions and ink jet inks containing them and printing method using them

IN Takahashi, Mari; Ofuku, Koji; Miura, Norio

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 58 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

GΙ

	J111 I						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 2003213152	A2	20030730	JP 2002-14016	20020123		
PRAI	JP 2002-14016		20020123				
os	MARPAT 139:134885						

$$\begin{array}{c|c}
R^1 & Y - Q \\
X & N & N \\
N & & G^1 & I
\end{array}$$

$$R^2$$
 $N$ 
 $N$ 
 $X$ 
 $G^1$ 
 $N$ 
 $N$ 
 $X$ 
 $N$ 
 $X$ 
 $Y - Q$ 
 $Y - Q$ 

$$R^2$$
 $X$ 
 $N$ 
 $R^3$ 
 $G^1$ 
III

The ink-jet inks giving prints with high color d., light fastness and color resolution, contain colorants which are specific fused triazole compds. bearing 5- or 6-membered aromatic rings or heterocyclic rings such as I, II, III and IV [R1-3 = H, substituting groups; X = 0, CR4R5 (where R4,R5 = electron-withdrawing groups); Y = N, L1-(L2-L3)m- groups (where L1, L2, L3 = N, methylene group; m = 0,1,2); Z = azo group; G = H, substituting groups; Q = 5- or 6-membered aromatic rings or heterocyclic rings]. The colorants are dispersed in an aqueous medium or oil and contain hydrophobic organic solvent having b.p. of > 150.degree. and oil-soluble polymers for forming colorant particles which can be enclosed by a shell of polymers.

IC ICM C09B067-20

ICS B41J002-01; B41M005-00; C09B067-46; C09D011-00; C09B023-00; C09B026-06; C09B029-09; C09B029-36; C09B029-40; C09B055-00

CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and **Photographic** Sensitizers)

Section cross-reference(s): 42

ST ink jet printing colorant fused triazole compd ink dispersion

IT Polyvinyl butyrals

RL: TEM (Technical or engineered material use); USES (Uses)
(Denka Butyral 6000EP, Denka Butyral 2000L, S-lec BL-S, S-Lec KS 3 and S-Lec BX 1, oil-soluble; manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution)

IT Polyvinyl acetals

RL: TEM (Technical or engineered material use); USES (Uses) (acetoacetals, oil-soluble polymer; manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution)

IT Solvents

(high-boiling; manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution)

IT Inks

(jet-printing; manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution)

```
ΙT
     Dyes
     Pigments, nonbiological
        (manufacture of fused triazole compds. useful for colorants for ink jet inks
        with good light fastness and color resolution)
ΙT
     Polycarbonates, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (oil-soluble polymer; manufacture of fused triazole compds. useful for
        colorants for ink jet inks with good light fastness and color resolution)
IT
     Polyurethanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyester-, oil-soluble polymer; manufacture of fused triazole compds.
useful
        for colorants for ink jet inks with good light fastness and color
        resolution)
IT
     Polyurethanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyoxyalkylene-, oil-soluble polymer; manufacture of fused triazole
compds.
        useful for colorants for ink jet inks with good light fastness and
        color resolution)
IT
     159880-81-6P
                    209473-37-0P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (dyes; manufacture of fused triazole compds. useful for colorants for ink
        jet inks with good light fastness and color resolution)
     159880-87-2
ΙT
                   161257-20-1
                                 161257-25-6
                                               569348-58-9
                                                              569348-59-0
     569348-60-3
                   569348-61-4
                                 569348-62-5
                                                              569348-64-7
                                               569348-63-6
                                                              569348-71-6
     569348-65-8
                   569348-66-9
                                 569348-68-1
                                               569348-70-5
     569348-72-7
                   569348-73-8
                                 569348-74-9
                                               569348-75-0
                                                              569348-76-1
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dyes; manufacture of fused triazole compds. useful for colorants for ink
        jet inks with good light fastness and color resolution)
              78-51-3
                       84-61-7 84-74-2, Dibutyl phthalate
ΙT
     78-43-3
                                                                 103-23-1
                          1241-94-7 1330-78-5
     117-81-7
                122-62-3
                                                 2528-39-4
     5444-75-7, 2-Ethylhexyl benzoate
                                        28510-23-8
                                                     35541-81-2
                                                                   56975-20-3
     111671-75-1
     RL: NUU (Other use, unclassified); USES (Uses)
        (high-boiling solvent; manufacture of fused triazole compds. useful for
        colorants for ink jet inks with good light fastness and color resolution)
                    156353-74-1P
ΤT
     156353-48-9P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (manufacture of fused triazole compds. useful for colorants for ink jet inks
        with good light fastness and color resolution)
ΙT
     569348-77-2P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (manufacture of fused triazole compds. useful for colorants for ink jet inks
        with good light fastness and color resolution)
ΙT
     2052-49-5, Tetrabutylammonium hydroxide
                                               5930-28-9, 4-Amino-2,6-
     dichlorophenol
                      7364-25-2
                                  159880-91-8
                                               161257-27-8
                                                              569348-78-3
     569348-79-4
                   569348-80-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (manufacture of fused triazole compds. useful for colorants for ink jet inks
        with good light fastness and color resolution)
TΤ
     159880-82-7
                   159880-83-8
                                 209473-32-5
                                               209473-38-1
                                                              569348-81-8
     569348-82-9
                   569348-83-0
                                 569348-84-1
                                               569348-85-2
                                                              569348-86-3
     569348-87-4
                   569348-88-5
                                 569348-89-6
                                               569348-90-9
                                                             569348-91-0
     569348-92-1
                   569348-93-2
                                 569348-94-3
                                               569348-95-4
                                                             569348-96-5
```

569348-97-6 569348-98-7 569348-99-8 569349-00-4 569349-01-5 569349-02-6 569349-03-7 569349-05-9 569349-06-0 569349-07-1 569349-08-2

RL: TEM (Technical or engineered material use); USES (Uses) (manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution)

25037-45-0, Bisphenol A-carbonic acid 24936-68-3, Iupilon S 3000, uses 25119-83-9, Acrylic acid-butyl acrylate copolymer 113032-06-7, Ethylene glycol-isophthalic acid-neopentyl glycol-5-sulfoisophthalic acid-terephthalic acid copolymer 126464-54-8, Morthane CA 118 341536-55-8, Acrylic acid-butyl acrylate-1H,1H,2H,2Hperfluorodecyl acrylate copolymer 363159-00-6, Methacrylic acid-methyl methacrylate-tetrafluoroethyl methacrylate copolymer 363607-64-1, 2-Acrylamido-2-methylpropanesulfonic acid-tert-butyl methacrylate-ethyl 558484-70-1, 1,4-Butanediol-ethylene glycol-hexane acrylate copolymer 1,6-diisocyanate-polyethylene glycol-tolylene isocyanate copolymer RL: TEM (Technical or engineered material use); USES (Uses)

(oil-soluble polymer; manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution) 9011-14-7, Delpet 560F 25085-34-1, Joncryl 67 26010-51-5, 2-Hydroxyethyl methacrylate-styrene copolymer 78736-61-5, Polyethylene

2-Hydroxyethyl methacrylate-styrene copolymer 78736-61-5, Polyethylene glycol monomethacrylate-styrene copolymer RL: TEM (Technical or engineered material use); USES (Uses)

(shell for pigment; manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution)
1330-78-5

RL: NUU (Other use, unclassified); USES (Uses)
(high-boiling solvent; manufacture of fused triazole compds. useful for colorants for ink jet inks with good light fastness and color resolution)
1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

IT

ΙT

ΙT

RN

3 (D1-Me)

L44 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:423011 HCAPLUS

DN 137:13284

TI Ink-jet inks, their manufacture, and printing process using the same

IN Yamanouchi, Junichi; Ishizuka, Takahiro; Yabuki, Yoshiharu

#### ♦ WALKE 10/806451 12/20/04 Page 6

PΑ Fuji Photo Film Co., Ltd., Japan SO Jpn. Kokai Tokkyo Koho, 80 pp.

CODEN: JKXXAF

DT Patent LA

Japanese

FAN. CNT 1

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2002161225 US 2002143079	A2 A1	20020604 20021003	JP 2001-230507 US 2001-922842	20010730 20010807
PRAI	US 6800673 JP 2000-238817 JP 2001-230507	B2 A A	20041005 20000807 20010730		
OS GI	MARPAT 137:13284				

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- AB The ink-jet inks are prepared by mixing (A) emulsions of water -insol. ionic group-containing polymers with (B) water-based dispersions of colorant fine particles containing hydrophobic high-b.p. organic solvents with b.p. .gtoreq.150 and oil-soluble dyes. The surface of dispersoids of B may be coated with polymers of A. The oil-soluble dyes may be shown as I (X =residue of color photog. coupler; A = NR4R5, OH; R4, R5 = H, aliphatic, aromatic, heterocyclic; B1 = :CR6, :N; B2 = CR7:, :N; R2, R3, R6, R7 = H, halo, aliphatic, aromatic, heterocyclic, CN, OR51, SR52, CO2R53, OCOR54, NR55R56, CONR57R58, SO2R59, SO2NR60R61, NR62CONR63R64, NR65CO2R66, COR67, NR68COR69, NR70SO2R71; R51-R71 = H, aliphatic, aromatic; R2 and R3, R3 and R4, R4 and R5, R5 and R6, R6 and R7 may be bonded to each other and form ring). The oil-soluble dyes may be azo dyes shown as II [A = residue of 5-membered ring diazo component ANH2; as for B1 and B2, B1 = :CR1 and B2 = CR2:, or one is N and the other is :CR1 or CR2:; R5, R6 = H, aliphatic, aromatic, heterocyclic, acyl, CO or SO2 which is bonded to alkoxy, aryloxy, or NH2 (these groups may be further substituted); G, R1, R2 = H, halo, aliphatic, aromatic, heterocyclic, CN, CO or OCO which is bonded to OH, NH2, alkoxy, or aryloxy, acyl, OH, alkoxy, aryloxy, siloxy, acyloxy, heterocyclic oxy, amino which includes NHPh, acylamino, NHCONH2 or NHSO2NH2 which may be substituted with alkoxy or aryloxy, NO2, alkyl- or arylthio, SO2 which is bonded to alkyl, aryl, NH2, or OH, heterocyclic thio (these groups may be further substituted); R1 and R5, or R5 and R6 may be linked to each other and form 5- or 6-membered ring]. The oil-soluble dyes may be phthalocyanines shown as III [X1-X4 = SOZ1, SOZZ1, or SO2N21R22; Z1 = alkyl, cycloalkyl, alkenyl, aralkyl, aryl, heterocyclic (these groups may be substituted); R21, R22 = H, any group given for Z1;  $R21 \neq R22 = H$ ; Y1-Y4 = monovalent substituent; a1-a4, b1-b4 = 0-4integer; a total of a1-a4  $\geq$ 2]. The inks produce vivid images regardless of type of papers.
- IC ICM C09D011-00
  - ICS B41J002-01; B41M005-00
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 38
- ST anticlogging ink jet oil sol dye; ionic polymer emulsion aq ink jet; microcapsule oil sol dye ink jet; water based ink oil sol dye; org solvent water sol dye ink

```
IΤ
     Inks
        (jet-printing, anticlogging, water-thinned; water
        -based ink-jet inks prepared by mixing water-insol. ionic
        group-containing polymers with dispersions containing organic
        solvents and oil-soluble dyes)
ΙT
     Dyes
        (oil-soluble; water-based ink-jet inks prepared by mixing
        water-insol. ionic group-containing polymers with
        dispersions containing organic solvents and
        oil-soluble dyes)
ΙT
     78-42-2, Tris(2-ethylhexyl) phosphate
                                             84-74-2, Dibutyl phthalate
     1330-78-5
                 2528-39-4, Trihexyl phosphate
                                               129877-64-1,
     Tris(2,4,4-trimethylpentyl) phosphate 176533-62-3
     RL: NUU (Other use, unclassified); TEM (Technical or engineered material
     use); USES (Uses)
        (organic solvents; water-based ink-jet inks
        prepared by mixing water-insol. ionic group-containing polymers
        with dispersions containing oil-soluble dyes and)
ΙT
     3648-21-3, Diheptyl phthalate
                                     25119-83-9, Acrylic acid-butyl acrylate
                 26284-14-0, Butyl methacrylate-methacrylic acid copolymer
     26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer
     28572-98-7, Ethyl methacrylate-methacrylic acid copolymer
                                                                 30705-21-6,
     Acrylic acid-2-ethylhexyl acrylate-methyl methacrylate copolymer
     70806-79-0
                 111984-72-6, 2-Acrylamido-2-methylpropanesulfonic acid-ethyl
     methacrylate copolymer 113032-06-7, Ethylene glycol-isophthalic
     acid-neopentyl glycol-5-sulfoisophthalic acid-terephthalic acid copolymer
                                 123036-85-1
     118150-13-3
                  118150-18-8
                                               142495-59-8, Ethyl
     methacrylate-2-carboxyethyl methacrylate copolymer
                                                         346709-26-0
     355841-67-7, 2,2-Bis(hydroxymethyl)propionic acid-4,4'-diphenylmethane
     diisocyanate-ethylene glycol-hexamethylene diisocyanate-tetraethylene
                        369595-79-9 369595-82-4
                                                   414909-45-8
                                                                414909-46-9
     glycol copolymer
                   415684-04-7
     414909-47-0
     RL: TEM (Technical or engineered material use); USES (Uses)
        (water-based ink-jet inks prepared by mixing water
        -insol. ionic group-containing polymers with dispersions containing
        organic solvents and oil-soluble dyes)
ΤТ
     1330-78-5
     RL: NUU (Other use, unclassified); TEM (Technical or engineered material
     use); USES (Uses)
        (organic solvents; water-based ink-jet inks
        prepared by mixing water-insol. ionic group-containing polymers
        with dispersions containing oil-soluble dyes and)
RN
     1330-78-5 HCAPLUS
CN
     Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)
```

L44 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:407154 HCAPLUS

DN 136:408960

TI Oil-in-water emulsion for photography and its use in silver halide color photographic photosensitive material

IN Ito, Akiko

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002156720	A2	20020531	JP 2000-350766	20001117
DDAT TD 2000-250766		20001117		

PRAI JP 2000-350766

20001117

The emulsion is obtained by **dispersing** an auxiliary solvent-free oil phase composition containing ≥1 hydrophobic substance for photog. with a binder of (1) ion-exchanged deionized gelatin containing Ca2+ ≤100, Na+ ≤300, SO32- ≤300, and Cl- ≤200 ppm (based on dry gelatin) or (2) gelatin having average mol. weight 40,000-80,000. The pH of

the aqueous gelatin solution used in the **dispersing** step may be controlled with organic acids to 5.0-6.0. Alternatively, the emulsion is obtained by ultrasonic-melting the oil phase composition, heat-dissolving the composition,

and

dispersing the composition in a binder. The emulsion has good stability and gives the photosensitive material with improved color formation.

IC ICM G03C001-06 ICS G03C001-047

CC 74-2 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST gelatin binder oil water emulsion photog; ultrasonic melting hydrophobic substance oil emulsion photog; silver halide color photog photosensitive material emulsion

IT Photographic films

CN

(color; oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) IT Sound and Ultrasound (melting of hydrophobic substance in oil by; oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) IT Photographic couplers (oil phase component; oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) IT Photographic emulsions (oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) TΤ Gelatins, processes RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses) (oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) 431946-69-9 ΙT 31188-91-7 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (coupler, oil phase component; oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) IT 1330-78-5, Tricresyl phosphate RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses) (oil phase component; oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) ΙT 77-92-9, Citric acid, uses RL: NUU (Other use, unclassified); USES (Uses) (pH control by; oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) 1330-78-5, Tricresyl phosphate ΙT RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses) (oil phase component; oil-in-water emulsion using gelatin binder for silver halide color photog. photosensitive material) RN1330-78-5 HCAPLUS

Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:771034 HCAPLUS

DN 135:325257

TI Process for preparing water dispersible negative-type photosensitive compositions

IN Lin, Hsien Kuang; Jeng, Jauder

PA Industrial Technology Research Foundation, Taiwan

SO U.S., 6 pp. o CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

t Min.	CIVI I					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6306557	B1	20011023	US 2000-553257	20000420	
DDAT	HS 2000-553257		20000420			

PRAI US 2000-553257 20000420

The present invention discloses a process for preparing a waterdispersible photosensitive composition, including the steps of: (a)
adding an unsatd. photomonomer and/or a plasticizer to a carboxyl-group
bearing acrylic resin solution which contains at least an organic
solvent; (b) distilling and removing said organic
solvent to form a resin paste; (c) dissolving a photoinitiator and
an alkaline into said resin paste; (d) adding deionized water and
mixing thoroughly to form an emulsion; and (e) adjusting the viscosity or
said emulsion with a water-soluble resin. The novelty of the
present invention is the first step, in which a photomonomer and a
plasticizer is dissolved in an acrylic resin solution containing an org
. solvent. The organic solvent in the mixture is
then removed in a distillation manner arid circulated for reuse. Therefore, the
solvent content of the produced photosensitive composition can be reduced to a
relatively low level, and the solvent used can be circulated for reuse so

that the production costs can be decreased. IC ICM G03F007-027

NCL 430288100

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 35, 38

ST photoresist photomonomer plasticizer dissoln acrylic resin org solvent IT Photoresists Plasticizers (preparation of water dispersible neg.-type photosensitive compns.) IT 60506-81-2, SR 399 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (photomonomer; preparation of water dispersible neg.-type photosensitive compns.) IT 1330-78-5, Tricresyl phosphate 22790-12-1, Tetraethylene glycol diacetate RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (plasticizer; preparation of water dispersible neg.-type photosensitive compns.) IT 367909-64-6, PM 4149 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (preparation of water dispersible neg.-type photosensitive compns.) IT 9010-92-8P, Methacrylic acid-styrene copolymer 25301-37-5P, Butyl methacrylate-methacrylic acid-styrene copolymer 25322-25-2P, Acrylic acid-methylmethacrylate copolymer 26898-31-7P, Acrylic acid-butyl methacrylate-methylmethacrylate copolymer RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of water dispersible neg.-type photosensitive compns.) IT 96-22-0, Diethyl ketone 84540-57-8, Propyleneglycol monomethyl ether acetate RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (solvent; preparation of water dispersible neg.-type photosensitive compns.) ΙT 1330-78-5, Tricresyl phosphate RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (plasticizer; preparation of water dispersible neg.-type photosensitive compns.) RN1330-78-5 HCAPLUS CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

# RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 5 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:194550 HCAPLUS

DN 134:245299

TI Microcapsules containing liquids separable into plurality of phases, manufacture of the microcapsules, and display device using the microcapsules

IN Kato, Ikuo; Okada, Takashi; Kondo, Hitoshi

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

ran.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001070783	A2	20010321	JP 1999-288276	19991008
	US 6514328	В1	20030204 `	US 2000-497947	20000204
PRAI	JP 1999-184710	Α	19990630		
	JP 1999-29238	Α	19990205		
	JP 1999-288276	А	19991008		
	JP 2000-26043	A	20000203		

AB The microcapsules contain plurality of solvents and/or dispersing mediums separable into ≥2 phases at a temperature in using wherein the amts. of the liqs. are regulated as follows. Difference between the amount of 1 of the liqs. (A) dissolved in another liquid (B) at the temperature in use and the dissolved amount at a higher temperature is the amount of A whose phase is

separated from that of B at the temperature in use. The display device has a means

of changing light absorption and/or reflection according to change of phys. state and/or chemical state of dyes and/or pigments in the microcapsules. The microcapsules, in which liqs. with different properties are separated in  $\geq 2$  phases at a uniform ratio, provides uniformly displayed images under electrophoresis, etc.

IC ICM B01J013-14

ICS B41M005-36; C09B067-08; C09D011-00; G02F001-19 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 45 ST microcapsule phase sepd solvent dispersing medium; display device microcapsule light absorption reflection; dye pigment microcapsule solvent dispersing medium IT Isoalkanes RL: NUU (Other use, unclassified); USES (Uses) (C13-14, Isopar M; microcapsules containing phase-separated ligs. for display device providing image corresponding to light absorption and reflection) IT Isoalkanes RL: NUU (Other use, unclassified); USES (Uses) (C9-12, Isopar H; microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection) Polysiloxanes, uses ΙT RL: NUU (Other use, unclassified); USES (Uses) (SH200 5CS; microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection) ΙT Coupling agents (fluorine-containing silane, for modification of pigment; in microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection) ΙT Emulsification (for preparation of microcapsules containing phase-separated ligs. for display device providing image corresponding to light absorption and reflection) IT Dyes Pigments, nonbiological (in microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection) Fluoropolymers, uses RL: DEV (Device component use); USES (Uses) (in microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection) Disperse systems Microcapsules Optical imaging devices Solvents (microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection) ΙT Electrophoresis (microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection using) IT 16627-68-2 RL: NUU (Other use, unclassified); USES (Uses) (T 5216; microcapsules containing phase-separated ligs. for display device providing image corresponding to light absorption and reflection) ΙT 9002-84-0, Teflon 7A-J 13463-67-7, Titania, uses 32724-62-2, Macrolex Blue RR RL: DEV (Device component use); USES (Uses) (in microcapsules containing phase-separated liqs. for display device providing

image corresponding to light absorption and reflection)

108-95-2, Phenol, uses 112-80-1, Oleic acid, uses 335-36-4, Fluorinert FC 75 540-84-1, 2,2,4-Trimethylpentane 1077-16-3, Hexylbenzene

1330-78-5, Tricresyl phosphate 7732-18-5, Water, uses

51142-49-5, Fluorinert FC 40 163702-05-4, HFE 7200 316806-89-0, Fluorinert FC 3283

RL: NUU (Other use, unclassified); USES (Uses)
(microcapsules containing phase-separated liqs. for display device providing image corresponding to light absorption and reflection)

IT 1330-78-5, Tricresyl phosphate

RL: NUU (Other use, unclassified); USES (Uses)
(microcapsules containing **phase**-separated liqs. for display device providing image corresponding to light absorption and reflection)
1330-78-5 HCAPLUS

RN 1330-78-5 HCAPLUS CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

3 (D1-Me)

L44 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:68260 HCAPLUS

DN 134:139148

TI Aqueous dispersion or molten product of water
-insoluble photographic useful compound, manufacture thereof, coating
composition, and silver halide photographic material

IN Nakanishi, Masatoshi; Saito, Koichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 56 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	. 01.1 1				
	PATENT NO.		DATE	APPLICATION NO.	DATE
ΡI	JP 2001027795	A2	20010130	JP 1999-312944	19991102
	US 6413706	В1	20020702	US 2000-568806	20000511
PRA:	I JP 1999-130606	A	19990511		
	JP 1999-312944	А	19991102		

AB A composition containing ≥1 water-insol. photog. useful compound is mixed with an aqueous medium followed by making fine particles by

using a super-high pressure homogenizer at ≥180 MPa (1800 bar) to give an aqueous dispersion of the compound An aqueous dispersion obtained by the above process, a molten product obtained by mixing and dissolving the compound with a high b.p. org . solvent in a super-high pressure jet flow, a coating composition using the aqueous dispersion, and a photog. material manufactured by using the aqueous dispersion are also claimed. The aqueous dispersion is obtained effectively without using low b.p. solvents by a simple process. IC ICM G03C007-388 ICS B01F003-12; B01F005-02; B01J013-00; B02C019-06; G03C001-06 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) ST photog dispersion manuf homogenizer TΤ Homogenization (apparatus; manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) IT Mixers (processing apparatus) (homogenization apparatus; manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) IT Photographic films (manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) ΙT Gelatins, uses RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) TΤ 70950-45-7 124088-61-5 128188-09-0 144917-51-1 176308-75-1 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) ΙT 577-11-7, Aerosol OT 25155-30-0, Sodium dodecylbenzenesulfonate RL: TEM (Technical or engineered material use); USES (Uses) (manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) ΙT 1330-78-5, Tricresyl phosphate RL: NUU (Other use, unclassified); USES (Uses) (solvent; manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) ΙT 1330-78-5, Tricresyl phosphate RL: NUU (Other use, unclassified); USES (Uses) (solvent; manufacture of aqueous dispersion or molten product of photog. compound using homogenizer) RN 1330-78-5 HCAPLUS CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:62603 HCAPLUS

DN 134:123631

TΙ Photothermographic material containing composite particles and their manufacture

ΙN Ueda, Eiichi; Kubo, Nobuo

PΑ Konica Co., Japan

Jpn. Kokai Tokkyo Koho, 19 pp. SO

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001022026	A2	20010126	JP 1999-193068	19990707
PRAI	JP 1999-193068		19990707		

AB The material comprises a support having thereon a photosensitive layer containing a photosensitive Ag halide, the composite particles containing an organic

acid Ag salt and a high b.p. organic solvent, a reducing agent, and a binder. The composite particles are manufactured by dispersing the organic acid Ag salt into water in the presence of a surfactant and then by further dispersing after adding the organic solvent. The material is manufactured by using an aqueous solution to prevent environmental pollution, showing reduced fog at high humidity.

IC ICM G03C001-498

ICS G03C001-74; G03C001-76

74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photothermog material org silver salt dispersion; org solvent silver salt composite particle

IT Photothermographic copying

(photothermog. material containing composite particle containing organic silver

salt and high b.p. solvent)

IT 2489-05-6P, Silver behenate 3507-99-1P, Silver stearate RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

 $\hbox{(photothermog. material containing composite particle containing organic silver}\\$ 

salt and high b.p. solvent)

IT 84-74-2, Dibutyl phthalate 84-75-3, Dihexyl phthalate 117-84-0,

Dioctyl phthalate 1330-78-5, Tricresyl phosphate

RL: TEM (Technical or engineered material use); USES (Uses)

(photothermog. material containing composite particle containing organic silver

salt and high b.p. solvent)

IT 577-11-7, Sodium diethylhexylsulfosuccinate

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(surfactant; photothermog. material containing composite particle containing organic silver salt and high b.p. solvent)

IT 1330-78-5, Tricresyl phosphate

RL: TEM (Technical or engineered material use); USES (Uses)

(photothermog. material containing composite particle containing organic silver

salt and high b.p. solvent)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:412734 HCAPLUS

DN 131:108856

TI Silver halide photographic material

IN Ohzeki, Tomoyuki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

PATENT NO. KIND DATE APPLICATION NO. DATE

ΡI	JΡ	11174609	A2	19990702	JP	1997-354106	19971208
	US	6027866	Α	20000222	US	1998-185618	19981104
PRAI	JP	1997-322355		19971107			
	JP	1997-354105		19971208			
	JP	1997-354106		19971208			

AB The title material possesses ≥1 Ag halide emulsion layer containing Ag halide grains of which ≥50% of the total projective area are occupied by tabular grains with aspect ratio ≥5 on a support and contains a pigment having a maximum absorption wavelength in the range of 570-650 nm in the emulsion layer and/or the hydrophilic colloid layer upper than the emulsion layer and the pigment is dispersed in lipophilic fine particles formed by using an organic solvent with b.p. ≥140° which is immiscible with water. The material provides improved black tone in the transmitted and reflected Ag image and shows high sensitivity and covering power and staining of fluorescent intensifying screen is suppressed.

IC ICM G03C001-035

ICS G03C001-00; G03C001-35; G03C001-76

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
Section cross-reference(s): 41

ST photog film pigment dispersion lipophilic particle

IT Photographic films

(photog. film containing pigment **dispersed** in lipophilic particles)

IT 81-77-6, Microlith Blue A3R-K 147-14-8, Microlith Blue 4G-K 1330-78-5 17741-63-8

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(photog. film containing pigment **dispersed** in lipophilic particles)

IT 1330-78-5

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(photog. film containing pigment **dispersed** in lipophilic particles)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)



3 (D1-Me)

```
ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN
L44
     1998:631942 HCAPLUS
ΑN
DN
     129:252440
ΤI
     Manufacture of oil-in-water emulsion for photographic material
IN
     Saito, Koichi; Kuroda, Mitsuo; Koremura, Toshiharu; Wada, Takeshi
PA
     Fuji Photo Film Co., Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 6 pp.
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
                       KIND DATE
     PATENT NO.
                                          APPLICATION NO.
                                                                  DATE
                               -----
                                           -----
                        ----
     JP 10260488
                         A2
                               19980929 JP 1997-64855
PΤ
                                                                  19970318
PRAI JP 1997-64855
                                19970318
     The title method involves the following steps; (1) dissolving a
     water-insol. coupler and/or a hydrophobic substance such as
     additives and an oily binder in an organic solvent, (2)
     mixing the resulting solution with an aqueous solution containing an
     aqueous binder such as gelatin for emulsion dispersion, (3)
     introducing the dispersion to an online-type continuous
     emulsion-dispersion apparatus while controlling particle size, (4)
     introducing the dispersion to a reduced-pressure evaporator
     while selectively volatiling a low-b.p. organic solvent
     in the dispersion, and (5) separating a liquid phase and a vapor phase
     of the low-b.p. solvent to recover each phase. An emulsion without large
     particles was obtained.
IC
     ICM G03C001-00
     ICS B01F003-08; G03C007-388
     74-2 (Radiation Chemistry, Photochemistry, and Photographic and
CC
     Other Reprographic Processes)
ST
     photog emulsion manuf oil in water; coupler photog emulsion
    manuf particle size; gelatin photog emulsion manuf particle size
IT
     Gelatins, processes
     RL: PEP (Physical, engineering or chemical process); TEM (Technical or
     engineered material use); PROC (Process); USES (Uses)
        (binder; manufacture of oil-in-water photog. emulsion without
        large particles)
ΙT
     Cyan couplers
     Photographic emulsions
        (manufacture of oil-in-water photog. emulsion without large
        particles)
ΙT
    Emulsions
        (oil-in-water; manufacture of oil-in-water photog.
        emulsion without large particles)
ΙT
    1330-78-5, Tricresyl phosphate
     RL: PEP (Physical, engineering or chemical process); TEM (Technical or
     engineered material use); PROC (Process); USES (Uses)
        (binder; manufacture of oil-in-water photog. emulsion without
        large particles)
ΙT
    141-78-6, Ethyl acetate, processes
    RL: NUU (Other use, unclassified); REM (Removal or disposal); PROC
     (Process); USES (Uses)
        (solvent; manufacture of oil-in-water photog. emulsion without
        large particles)
IT
    1330-78-5, Tricresyl phosphate
     RL: PEP (Physical, engineering or chemical process); TEM (Technical or
```

## \* WALKE 10/806451 12/20/04 Page 20

engineered material use); PROC (Process); USES (Uses)
 (binder; manufacture of oil-in-water photog. emulsion without
 large particles)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

3 (D1-Me)

L44 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:251326 HCAPLUS

DN 128:328714

TI Method for preparing dispersions of chromogenic components

IN Fedorov, Alexander Dmitrievich; Kumarin, Evgeny Konstantinovich

PA Firm Forsat Ltd., Russia; Company I.F.F. Investments Ltd.; Fedorov, Alexander Dmitrievich; Kumarin, Evgeny Konstantinovich

SO PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DT Patent

LA Russian

FAN.CNT 1

		_																	
	PATENT NO.				KIND DATE					APPLICATION NO.					D.	DATE			
							-									_			
PI	WO	98168	373			A1		1998	0423		WO 1	996-1	RU29	8		1	9961	014	
		W:	CA,	DE,	GB,	ΗU,	KR,	RU,	UA,	US									
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙŤ,	LU,	MC,	NL,	PT,	SE
PRAI	WO	1996-	-RU2	98				1996	1014										
GT																			

$$R_1R^2R^3Si - O = \begin{cases} R^2 \\ Si - O \\ R^3 \end{cases} SiR^3R^2R_1$$

AB A method is described for preparing **dispersions** of chromogenic components which can be used in the chemical and photog. industry. The

TC

CC

ST

ΙT

IT

ΙT

ΙT

ΙT

ΙT

ΙT

ΙT

RN

CN

1330-78-5 HCAPLUS

method provides color coupler dispersions with increased coagulation stability. The chromogenic components are dissolved in an organic solvent having a high boiling temperature or in a mixture of such solvents. The solution thus obtained is then dispersed in an aqueous solution containing an ionogen surfactant substance. Linear or cyclic organic silicon compound I (R1, RI1, R2, R3 = Me, Et, Ph, trifluoropropyl; n = 0-300) is added before or after the dissoln. of the chromogenic components. Also, a Bu methacrylate-methacrylic acid copolymer, II (X = 5.0-7.0 parts by weight; Y = 0.2-0.7 parts by weight) can be added to the organic solvents or their mixture The dispersion method is preferably carried out using ultrasonic vibrations. ICM G03C007-388 ICS B01F007-00; B01F011-02 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) chromogenic compd dispersion prepn photog Disperse systems (dispersions containing silicon compound for increased coagulation stability) Photographic couplers (dispersions of photog. color couplers containing silicon compound for increased coagulation stability) Polysiloxanes, uses Siloxanes (nonpolymeric) RL: TEM (Technical or engineered material use); USES (Uses) (dispersions of photog. color couplers containing silicon compound for increased coagulation stability) Polysiloxanes, uses Polysiloxanes, uses RL: TEM (Technical or engineered material use); USES (Uses) (fluorine-containing; dispersions of photog. color couplers containing silicon compound for increased coagulation stability) Photographic emulsions (photog. dispersions containing silicon compound for increased coagulation stability) Fluoropolymers, uses Fluoropolymers, uses RL: TEM (Technical or engineered material use); USES (Uses) (polysiloxane-; dispersions of photog. color couplers containing silicon compound for increased coagulation stability) 84-74-2, Dibutyl phthalate 115-86-6, Triphenyl phosphate 126-73-8, Tributyl phosphate, uses 141-97-9 994-49-0 **1330-78-5**, 25155-30-0, Sodium dodecylphenylsulfonate Tricresyl phosphate 26284-14-0, Butyl methacrylate-methacrylic acid copolymer 42557-10-8 195868-18-9 206554-65-6 206667-85-8, C 213 206667-89-2, M 651 206667-94-9, Y 488 RL: TEM (Technical or engineered material use); USES (Uses) (dispersions of photog. color couplers containing silicon compound for increased coagulation stability) 1330-78-5, Tricresyl phosphate RL: TEM (Technical or engineered material use); USES (Uses) (dispersions of photog. color couplers containing silicon compound for increased coagulation stability)

Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:302889 HCAPLUS

DN 126:285257

Improved oil-in-water emulsions and especially photographic ΤI dispersions

IN Young, David John

PΑ Kodak Limited, UK; Eastman Kodak Company

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

	DT T. D	Patent English												
		CNT 1												
		PATENT NO.	KIND	DATE	APPLICATION NO.	DATE								
	PI		A1	19970312	EP 1996-202394	19960828								
		EP 761297 R: DE, FR, GB	B1	20020814										
		US 5827452		19981027	US 1996-706063	19960830								
	AB	GB 1995-17912 The title emulsions,			hotog. <b>dispersions</b> are	provided								
having a reduced droplet size in the oil phase by an incre						se in the								
viscosity of the aqueous phase prior to homogenization of the oil and aqueous phases. The emulsions are formed by homogenizing the oil and aqueous phases of the emulsion, and the droplet size of the dispersed oil phase is reduced by an increase in the viscosity of the aqueous phase prior to the homogenization. A photog. element comprises a photog.														
									dispersion in which	-				
									image dye-forming <b>coupler</b> or filter agent in ≥1					
									organic solvent contained within an aqueous gel as					
										e, in a	ssociation '	with a Ag halide emulsi	ion layer.	
	TC	TCM B01F017-00												

ICM B01F017-00 ICS G03C001-047 IC

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST oil water emulsion photog dispersion manuf

IT Emulsions

(oil-in-water; photog. dispersions)

IT 84-74-2, Dibutyl phthalate 124-17-4 1330-78-5, Tricresyl phosphate 3846-71-7 3896-11-5 30744-85-5 52229-50-2, Gantrez AN 149 56924-48-2, Dioctylhydroquinone 65863-15-2, Alkanol XC 188987-40-8 188987-41-9

RL: PEP (Physical, engineering or chemical process); PROC (Process) (in photog. dispersion contained in aqueous gel

IT 1330-78-5, Tricresyl phosphate

RL: PEP (Physical, engineering or chemical process); PROC (Process) (in photog. dispersion contained in aqueous gel

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:58193 HCAPLUS

DN 124:101774

TI **Dispersion** method for hydrophobic, photographically useful compound.

IN Kawanishi, Naoyuki; Fujiwara, Kazuhiko; Yasuda, Tomokazu

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 683429 EP 683429	A1 B1	19951122 19970910	EP 1995-107728	19950519
	R: DE, FR, GB, JP 07319104		19951208	JP 1994-107060	19940520
	JP 3444650	B2	20030908		
	US 5573900	Α	19961112	US 1995-445293	19950519

PRAI JP 1994-107060 A 19940520

AB A method for dispersing a water-insol. phase containing a hydrophobic, photog. useful compound in water or a hydrophilic colloid composition using an anionic surface active agent is disclosed, which comprises dispersing the hydrophobic, photog. useful compound by using an anionic surface active agent having a hydrophobic group and a group represented by -SO3M or -OSO3M (where M represents a cation) and a specific phosphorus-containing surface active compound, or, adding the anionic surface active agent for dispersion, and after the completion of dispersion further adding the specific phosphorus-containing surface active compound According to the dispersion method of the present invention, a dispersion favored with maintenance of fine particle performance at the dispersion and free of grain growth during aged storage or generation of coarse grains or precipitated crystals can be obtained.

IC ICM G03C007-388

ICS G03C001-38; G03C001-005

- CC 74-2 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)
- ST dispersion hydrophobic photog useful compd

IT Photographic emulsions

(dispersion method for hydrophobic, photog. useful compds. for)

IT 577-11-7, Sodium bis(2-ethylhexyl)sulfosuccinate 1330-78-5,
 Tricresyl phosphate 25155-30-0, Sodium dodecylbenzenesulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersing agent for hydrophobic photog. useful compds. in
 gelatin solns.)

IT 1330-78-5, Tricresyl phosphate

RL: TEM (Technical or engineered material use); USES (Uses) (dispersing agent for hydrophobic photog. useful compds. in gelatin solns.)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

3 (D1-Me)

L44 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN AN 1995:186787 HCAPLUS

DN 123:21913 ΤI Photographic elements containing indoaniline dummy dyes ΑU Anon. CS UK SO Research Disclosure (1994), 365, 468-73 (No. 36519) CODEN: RSDSBB; ISSN: 0374-4353 DT Journal; Patent LA English APPLICATION NO. PATENT NO. KIND DATE DATE PΙ RD 365019 19940910 PRAI RD 1994-365019 19940910 MARPAT 123:21913 OS A photog. element is described which contains nondiffusible indoaniline ΑB dummy dye. The dye-containing dispersion (consisting of oil phase and aqueous gelatin phase) is coated in the appropriate layer of a multilayer element on a suitable support. In the multicolor films the indoaniline dummy dye are coated under at least 1 of the red-sensitive emulsion layers. CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) ST indoaniline dummy dye photog material ΙT Photographic films (color, indoaniline dummy dyes for) 84-74-2 **1330-78-5**, Tritolyl phosphate 3352-87-2, ΤТ N, N-Diethyldodecanamide RL: NUU (Other use, unclassified); USES (Uses) (dispersion of photog. indoaniline dummy dye containing) 25646-77-9 163915-57-9 ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (in preparation of photog. indoaniline dummy dye) ΙT 163915-58-0 RL: NUU (Other use, unclassified); USES (Uses) (photog. film containing indoaniline dummy dye) ΙT 163915-56-8P RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (photog. film containing indoaniline dummy dye) 1330-78-5, Tritolyl phosphate ΙT RL: NUU (Other use, unclassified); USES (Uses) (dispersion of photog. indoaniline dummy dye containing) RN 1330-78-5 HCAPLUS Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME) CN

CC

```
L44 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
    1994:711782 HCAPLUS
DN
    121:311782
TI
    Photographic dispersion
    Zengerle, Paul Leo; Miller, David Darrell; Whitesides, Thomas Haile;
ΙN
    Rieger, John Brian; Flow, Vincent James, III; Isaac, Walter Harold
PΑ
    Eastman Kodak Co., USA
SO
    PCT Int. Appl., 56 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
                      KIND
    PATENT NO.
                              DATE
                                        APPLICATION NO.
                                                                DATE
                              19940526 WO 1993-US11123
                                                                19931117
PΙ
    WO 9411784
                        A1
        W: JP
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                    A 19951121 US 1992-978104 19921118
    US 5468604
                               19941026
                                          EP 1994-902269
                                                               19931117
    EP 620929
                        A1
    EP 620929
                              20031001
                        В1
        R: BE, CH, DE, FR, GB, IT, LI, NL
    JP 07503331 T2 19950406
                                          JP 1993-512462
                                                                19931117
PRAI US 1992-978104
                               19921118
                         Α
    WO 1993-US11123
                              19931117
                        W
AB
    A stabilized photog. dispersion is prepared by adding a
    hydrophobic, photog. inert compound which has a logP(calc) .gtorsim.9 and
    does not solidify or gel the dispersed phase to a photog.
    dispersion comprising an aqueous medium and a
    dispersed liquid organic phase comprising a photog.
    useful compound which is (i) soluble in organic solvents, (ii)
    substantially insol. in H2O, and (iii) subject to particle
    growth of at least 10% of its initial particle size when maintained is
    said dispersion in the absence of the added photog. inert compound
    The incubation can be carried out at room temperature
    ICM G03C007-388
IC
    ICS G03C001-005
```

74-2 (Radiation Chemistry, Photochemistry, and Photographic and

Other Reprographic Processes)
ST photog emulsion crystal growth inhibitor

IT Crystal growth

(inhibitor; for photog. useful compound in a dispersion)

IT Photographic emulsions

(particle growth inhibitor for)

TT 78-42-2, Tri(2-ethylhexyl) phosphate 78-50-2, Trioctylphosphine oxide 84-74-2, Dibutyl phthalate 84-76-4, Dinonyl phthalate 84-77-5, Didecyl phthalate 103-24-2, Bis(2-ethylhexyl) azelate 131-18-0, Dipentyl phthalate 1116-76-3, Trioctyl amine 1330-78-5, Tricresyl phosphate 2082-79-3 2432-90-8, Didodecyl phthalate 56924-48-2, Dioctylhydroquinone 61600-15-5 82374-34-3, Bis(2-ethylhexyl) sulfoxide 93966-57-5 159297-06-0

RL: MOA (Modifier or additive use); USES (Uses)

(photog. dispersion containing particle growth inhibitor for photog. useful compound)

IT 1330-78-5, Tricresyl phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(photog. dispersion containing particle growth inhibitor for photog. useful compound)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:446514 HCAPLUS

DN 121:46514

TI Reactivity control in microcrystalline photographic coupler dispersions

IN Texter, John

PA Eastman Kodak Co., USA

SO Eur. Pat. Appl., 48 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

```
EP 591861
                                19940413
                                            EP 1993-115900
                                                                   19931001
PΙ
                          A1
     EP 591861
                                19990728
                          В1
         R: BE, CH, DE, FR, GB, IT, LI, NL
     US 5401623
                         Α
                                19950328
                                            US 1992-956140
                                                                   19921005
     JP 06214362
                          A2
                                19940805
                                            JP 1993-249014
                                                                   19931005
     US 5434036
                                            US 1994-247180
                          Α
                                19950718
                                                                   19940520
PRAI US 1992-956140
                         Α
                                19921005
     A photog. coupler dispersion comprises colloidal microcryst.
     particles of coupler, wherein the particles are wetted with an activating
     and water-immiscible organic solvent. A color
     photog. element comprises a support bearing at least one photog. Ag halide
     emulsion layer and the above microcryst. coupler dispersion in
     reactive association with the emulsion layer. Process for forming a
     microcryst. coupler dispersion comprises the steps of: providing
     crystalline coupler in an aqueous suspensions, dispersing the
     coupler with mech. shear, combining the coupler dispersion with
     an activating water-immiscible organic solvent,
     and mixing the combined dispersion.
IC
     ICM G03C007-388
CC
     74-2 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
ST
     photog coupler dispersion org solvent
ΙT
     Photographic couplers
        (dispersion, preparation of, activating water-immiscible
        organic solvent using)
ΙT
     77-93-0, Triethyl citrate
                                 78-42-2, Tri-(2-ethylhexyl) phosphate
     84-64-0, Butyl cyclohexyl phthalate 84-66-2, Diethyl phthalate
     84-74-2, Di-n-butyl phthalate 84-77-5, Di-n-decyl phthalate
     91-49-6, N-n-Butyl acetanilide 101-97-3, Ethyl phenylacetate
     104-43-8, p-Dodecyl phenol 109-43-3, Di-n-butyl sebacate
     111-87-5, 1-Octanol, uses 112-42-5, 1-Undecanol
                                                         117-81-7,
     Bis(2-ethylhexyl) phthalate
                                 117-82-8, Bis(2-methoxyethyl) phthalate
     117-83-9, Bis(2-n-butoxyethyl) phthalate 117-84-0, Di-n-octyl phthalate
     120-95-6, 2,4-Di-tert-amyl phenol 131-11-3, Dimethyl phthalate
     138-00-1, 2,4-Di-n-amyl phenol 504-20-1, Phorone
                                                          563-04-2,
                             607-81-8, Diethyl benzylmalonate
     Tri-m-cresyl phosphate
                         613-70-7, Guaiacol acetate 1330-78-5,
     Guaiacol n-caproate
     Tri-cresyl phosphate
                          2217-88-1, Ethyl-N, N-di-n-butyl carbamate
     2364-62-7, n-Butyl-2-methoxybenzoate 2528-39-4, Tri-n-hexyl phosphate
     2528-40-7, Tri-cyclohexyl phosphate
                                           3352-87-2, N,N-Diethyl lauramide
                5332-35-4, N-n-Amyl succinimide 26444-49-5, Cresyl diphenyl
                 53148-31-5
                            71510-39-9, N-n-Amyl phthalimide
                                                                93966-45-1
     phosphate
     94106-91-9, Tri-isononyl phosphate 109870-88-4, Bis(10,11-epoxyundecyl)
     phthalate
     RL: USES (Uses)
        (activating water-immiscible organic solvent
        , preparation of photog. couplers dispersion using)
     151-21-3, Sodium dodecyl sulfate, uses 577-11-7, Sodium
     bis(2-ethylhexyl)sulfosuccinate 6001-97-4, Sodium bis(1-
     methylpentyl) sulfosuccinate
                                  25155-30-0, Sodium dodecyl benzene sulfonate
                 156021-94-2, Sodium bis(β-phenylethyl)sulfosuccinate
     140137-30-0
     156021-95-3, Sodium bis(2-phenylpropyl)sulfosuccinate
     RL: USES (Uses)
        (dispersing aid, preparation of photog. coupler dispersion
        using)
IT
     91-49-6, N-n-Butyl acetanilide 109-43-3, Di-n-butyl
     sebacate 1330-78-5, Tri-cresyl phosphate
     RL: USES (Uses)
        (activating water-immiscible organic solvent
```

. WALKE 10/806451 12/20/04 Page 29

, preparation of photog. couplers dispersion using)

RN 91-49-6 HCAPLUS

Acetamide, N-butyl-N-phenyl- (9CI) (CA INDEX NAME) CN

RN 109-43-3 HCAPLUS

CN Decanedioic acid, dibutyl ester (9CI) (CA INDEX NAME)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:446502 HCAPLUS

DN 121:46502

ΤI silver halide photographic material

IN Myaki, Yukio; Ito, Tadashi

PA

Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 38 pp.

CODEN: JKXXAF

DT Patent

LAJapanese

באוז כאוד 1

TAN.CNI I							
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PI JP 05341441	A2	19931224	JP 1991-185766	19910701			
PRAT JP 1991-185766		19910701					

RN

CN

1330-78-5 HCAPLUS

AB In a silver halide photog, material with improved handling properties and providing silver images of superior tone quality comprising  $\geq 1$ silver halide photog. emulsion layer on ≥1 side of a transparent support, the photog. material comprises oleophlic particles made by dissolving ≥1 water-insol. organic solvent -soluble homopolymer or copolymer comprising repeating units containing no acid groups in a water-immiscible organic solvent having a m.p.  $\leq 100^{\circ}$  and a b.p.  $\leq 140^{\circ}$  and containing a dye having an absorption maximum in 570-700 nm and/or a dye having an absorption maximum in 500-570 nm . ICM G03C001-83 IC ICS G03C001-835 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) ST silver halide photog material dye Photographic emulsions IT (containing red-absorbing dyes dispersed in oleophilic polymer particles) ΙT 9011-14-7, Poly(methyl methacrylate) 9011-15-8, Poly(isobutyl methacrylate) 25101-13-7, Ethylene-methyl methacrylate copolymer 25322-25-2, Acrylic acid-methyl methacrylate copolymer 25768-50-7, Poly(cyclohexyl methacrylate) 28549-51-1, tert-Butyl methacrylate-methyl methacrylate copolymer 32760-09-1, Poly(N-tert-butylmethacrylamide) 34850-00-5 RL: USES (Uses) (oleophilic particles containing dyes and, for silver halide photog. materials) IΤ 84-74-2 **1330-78-5** 2528-39-4 129840-58-0 RL: USES (Uses) (oleophilic particles containing polymers, dyes and, for silver halide photog. materials) 82-16-6 32724-62-2 70806-79-0 155988-42-4 IT 155988-43-5 155988-44-6 RL: TEM (Technical or engineered material use); USES (Uses) (silver halide photog. material containing) IT 1330-78-5 RL: USES (Uses) (oleophilic particles containing polymers, dyes and, for silver halide photog. materials)

Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

1993:30049 HCAPLUS

Images-forming method using laser beam and thermal recording materials for

IN Hosoi, Noriyuki

Fuji Photo Film Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DTPatent

Japanese

FAN.CNT 1

PATENT NO.	KIND DATE	DATE	APPLICATION NO.	DATE
PI JP 04235090	A2	19920824	JP 1991-13065	19910110
PRAT JP 1991-13065		19910110		

AB A thermal recording material is adhered with a receptor sheet on which a laser beam is irradiated (from the side of the thermal recording material or the receptor sheet) to give images related to the quantity of the laser beam, where the thermal recording material comprises a substrate successively coated with a primer coating, and a heat-sensitive transferring layer containing (A) inorg .- or organic microparticle fillers, and (B) a coloring material which is an aqueous emulsion dispersion of an oil-soluble dye and/or C black dissolved or dispersed in an oily materials or an organic solvent of water-insol., or of water-slightly soluble The thermal recording material is claimed. Thus, a dye (dissolved in tricresyl phosphate-containing organic solvent) emulsion

in poly(vinylalc.)-base aqueous solvent was used to give a recording material which gave high-d. images.

IC ICM B41M005-30 ICS B41M005-26

74-6 (Radiation Chemistry, Photochemistry, and Photographic and CC Other Reprographic Processes)

ST thermal recording materials laser; printing material thermal carbon black; laser beam thermal recording material

ΙT Carbon black, uses RL: USES (Uses)

(thermal recording materials containing emulsion of)

Printing, nonimpact ΙT

(thermal, laser beam, materials for, containing dye emulsions)

ΙT 1330-78-5; Tricresyl phosphate 9002-89-5, Poly(vinyl alcohol)

RL: USES (Uses)

(thermal recording material containing dye emulsion of)

82708-08-5, Aizen Spilon Blue 2BNH ΙT

RL: USES (Uses)

(thermal recording material transferring layers containing emulsion of)

ΙT 13463-67-7, Titanium oxide, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(thermal recording materials containing, filler)

21645-51-2, Aluminum trihydroxide, uses ΙT

RL: TEM (Technical or engineered material use); USES (Uses)

(thermal recording materials containing, filler, MARTIFN OL-107 as)

ΙT 1330-78-5, Tricresyl phosphate

RL: USES (Uses)

(thermal recording material containing dye emulsion of)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

1992:458781 HCAPLUS AN

DN 117:58781

TISilver halide photographic materials with suppressed sweating

ΙN Hashimoto, Hiroyuki

PA

Konica Co., Japan Jpn. Kokai Tokkyo Koho, 19 pp. SO

CODEN: JKXXAF

DT Patent

LA Japanese

FAN CNT 1

FAIV.	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03235939	A2	19911021	JP 1990-32011	19900213
PRAI	JP 1990-32011		19900213		

AB The title materials have ≥1 layers containing high-boiling solvents (b.p..gtoreq.150.degree.) and compds.

RCH(OCOR1)Z1NHZ2OP(:O)(OH)(OM) (I; R = C10-20 alkyl or alkenyl; R1 = C9-19 alkyl, alkenyl; Z1-2 = bivalent group; M = cation). This suppresses so-called sweating of photog. films by oozing out or formation of droplet of high-boiling solvents contained in the materials. Thus, a film having a backcoat containing a dispersed dye, tricresyl phosphate, and 1 of I did not show sweating when stored for 2 days at 77°, 80% relative humidity after conditioning.

IC ICM G03C001-06 ICS G03C001-38

CC 74-2 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST sweating suppression photog material

IT Photographic films

(photog. film containing, for suppression of sweating)

IT 838-85-7, Diphenyl phosphate **1330-78-5**, Tricresyl phosphate 23552-74-1 115344-18-8 115372-50-4 115372-57-1 139127-54-1 142465-44-9 142465-45-0 142465-46-1 142465-47-2 142465-48-3 142465-49-4

RL: USES (Uses)

(photog. film containing, for suppression of sweating)

IT 1330-78-5, Tricresyl phosphate

RL: USES (Uses)

(photog. film containing, for suppression of sweating)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

3 (D1-Me)

L44 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:169163 HCAPLUS

DN 112:169163

TI Thermal recording material containing dye-precursor-incorporated microcapsules and a **dispersion** of color developing base

IN Usami, Tomomasa; Shimomura, Teruhiro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DT Patent LA Japanese FAN.CNT 1

11114.	CIVI I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 01145190	A2	19890607	JP 1987-301561	19871201
	JP 06104385	B4	19941221		
	GB 2213280	A1 .	19890809	GB 1988-27937	19881130
	GB 2213280	B2	19920102		
	US 4929411	Α	19900529	US 1988-278320	19881201
PRAI	JP 1987-301561		19871201		
GI					

AB The claimed recording material is characterized by the manufacturing process which comprises: (a) coating on a substrate a coating solution containing (1) microcapsules in which leuco dye precursor capable of reacting with an organic base to develop color is incorporated, and (2) the organic base disolved

in a water-insol. or scarcely soluble organic solvent and dispersed in the aqueous medium; and

Ι

(b) drying the coated web. It is a 2-color recording material with transparent background, which is suitable for overhead projection, and provides color images with good saturation and high d. Suitable dye precursors are acyl-lactone and acyl-sultone. Thus, microcapsules containing dye precursor I and emulsion of oil-in-water type containing N'N'-dicyclohexyl-N''-phenylguanidine and triphenylguanidine (organic base)/tricresyl phosphate and Et acetate (organic solvent) were mixed and coated on a support to make a thermal recording material.

IC ICM B41M005-18

CC 74-12 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST thermal recording material acceptor donor; acid dye precursor recording material; color former acidic recording material; org base developer thermal recording; guanidine developer thermal recording material

IT Projection slides

(overhead, two-color thermal printing materials for)

IT Printing, nonimpact

(thermal, materials for, containing color formers-containing microcapsules

and

organic bases, two-color, for overhead projection)

IT 101-01-9 4833-42-5 53770-52-8 74462-02-5 124777-89-5 124777-90-8 RL: USES (Uses)

(color developer, for thermal printing material)

IT 596-01-0 1552-42-7, Crystal Violet lactone 4430-25-5 7262-40-0

WALKE 10/806451 12/20/04 Page 35

15086-94-9 61738-00-9 77084-68-5 77084-71-0

RL: USES (Uses)

(color former, for thermal printing material)

IT 37337-02-3, Takenate D110N

RL: USES (Uses)

(microcapsule from, for thermal printing material)

IT 141-78-6, Ethyl acetate, uses and miscellaneous 1330-78-5,

Tricresyl phosphate

RL: USES (Uses)

(solvent, in thermal printing material manufacture)

IT 1330-78-5, Tricresyl phosphate

RL: USES (Uses)

(solvent, in thermal printing material manufacture)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:31328 HCAPLUS

DN 110:31328

TI Silver halide color photographic material containing oil-soluble couplers and high-boiling point **organic solvents** 

IN Ogawa, Tadashi; Takahashi, Osamu

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 160 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 1

LWM.	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 280238	A2	19880831	EP 1988-102576	19880222
	EP 280238	A3	19890906		
	EP 280238	В1	19930804		
	EP 280238	B2	20010530		
	R: DE, FR, GB,	NL			
	JP 64000537	A2	19890105	JP 1987-158948	19870626
	JP 2542852	B2	19961009		

```
US 4857449
                                19890815
                                            US 1988-159074
                                                                   19880223
                          Α
PRAI JP 1987-39825
                                19870223
                          Α
     JP 1987-158948
                                19870626
                         Α
     A Ag halide color photog. material comprises on a support ≥1 Ag
     halide photosensitive emulsion layer comprising an emulsified
     dispersion of fine lipophilic particles comprising a
     dispersion obtained by emulsifying and dispersing a
     mixed solution which comprises ≥1 type of couplers and ≥1 type
     of high-b.p. organic solvents and ≥1 type of homo-
     or copolymers which are water-insol. and soluble in the org
     . solvents and comprise \geq 1 type of repeating units which
     do not have acid groups in the main or side chains. The Ag halide
     photosensitive emulsion layer comprises a monodispersed AgCl, AgBr,
     Ag(Br,Cl) emulsion containing essentially no AgI and of which the (100) plane
     is enclosed. The Ag halide color photog. material thus produced provides
     dye images having good storage stability.
     ICM G03C007-26
IC
     ICS G03C007-32
CC
     74-2 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
ST
     color photog material polymer dispersion
ΙT
     Photographic emulsions
        (color, containing lipophilic particles containing polymers and oil-soluble
color
        formers and high-boiling organic solvents for improved
        dye image stability)
ΙT
     25267-41-8, Poly(N-tert-butylacrylamide) 68393-44-2 118257-62-8
     RL: USES (Uses)
        (lipophilic particles containing oil-soluble color formers and high-boiling
        organic solvents and, for color photog. emulsions for
        improved dye image stability)
IT
     31037-84-0
                  56339-92-5
                              96758-05-3
                                          101664-25-9
                                                        118266-49-2
     RL: USES (Uses)
        (lipophilic particles containing polymers and high-boiling organic
        solvents and, for color photog. emulsions with improved dye
        image stability)
TΤ
     78-42-2
              84-74-2
                       122-62-3 1330-78-5 72386-55-1
     118266-52-7
     RL: USES (Uses)
        (lipophilic particles containing polymers and oil-soluble color formers and,
        for color photog. emulsions with improved dye image stability)
ΙT
                  104660-33-5 118266-50-5
                                             118266-51-6
                                                            118272-28-9
     RL: TEM (Technical or engineered material use); USES (Uses)
        (magenta photog. coupler, lipophilic particles containing polymers and
        high-boiling organic solvents and, for color photog.
        emulsions with improved dye image stability)
ΙT
     54942-74-4
                  95050-16-1
     RL: USES (Uses)
        (yellow photog. coupler, lipophilic particles containing polymers and
        high-boiling organic solvents and, for color photog.
        emulsions with improved dye image stability)
ΙT
     1330-78-5
     RL: USES (Uses)
        (lipophilic particles containing polymers and oil-soluble color formers and,
        for color photog. emulsions with improved dye image stability)
RN
     1330-78-5 HCAPLUS
CN
     Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)
```

L44 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:640789 HCAPLUS

DN 109:240789

TI Thermal recording material and its manufacturing comprising coating a substrate with a transparent heat-sensitive layer

IN Usami, Toshimasa; Hatakeyama, Seiji; Shimomura, Akihiro; Tatsuta, Sumitaka

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
,	PI	EP 273752	A2	19880706	EP 1987-311474	19871224
		EP 273752	A3	19890607		
		EP 273752	B1	19920819		
		R: DE, GB				
		JP 63252783	A2	19881019	JP 1987-88196	19870409
		JP 06062011	B4	19940817		
		JP 63265682	A2	19881102	JP 1987-88197	19870409
		JP 07004986	В4	19950125		
		US 4857501	Α	19890815	US 1987-138163	19871228
	PRAI	JP 1986-203748	Α	19861225		
		JP 1987-88196	Α	19870409		
		JP 1987-88197	Α	19870409		
		JP 1986-121875	A1	19860526		
		JP 1986-292160	A1	19861208		

AB A composition containing an emulsified dispersion prepared by dispersing a color developer dissolved in an organic solvent slightly soluble or insol. in H2O and microcapsules containing a colorless or light colored electron donating dye precursor (core material), is coated onto a support and dried. The refractive index of the core material and that of the oil phase of the color developer dispersion is selected in the range of 0.97-1.03. By providing a transparent heat sensitive layer obtained by the above method on a printed support, printed matter can be seen through the heat sensitive layer. Thus, a heat sensitive layer was prepared from microcapsules of crystal

violet lactone and developer dispersion in 1-phenyl-1xylylethane and dibutylphthalate. The material gave images with high optical d. IC ICM B41M005-12 ICS B41M005-26 74-12 (Radiation Chemistry, Photochemistry, and Photographic and CC Other Reprographic Processes) thermal recording material transparent layer; developer solvent ST transparent thermal printing ΙT Printing, nonimpact (thermal, transparent layer for) IT 37337-02-3, Takenate D 110N RL: USES (Uses) (leuco dye microencapsulated with, thermal printing transparent layer

from)
1552-42-7, Crystal Violet lactone

RL: USES (Uses)

ΙT

(microencapsulated, thermal printing transparent layer with)

IT 77-40-7 94-18-8 53770-52-8 70516-41-5 74462-02-5 RL: USES (Uses)

(thermal printing developer, transparent layer with)

TT 75-09-2, Methylene chloride, uses and miscellaneous 84-74-2, Di-butylphthalate 102-09-0, Diphenylcarbonate 103-24-2, Dioctylazelate 105-75-9 105-76-0, Dibutylmaleate 108-32-7, Propylenecarbonate 123-25-1, Diethyl succinate 141-05-9, Diethylmaleate 141-78-6, Ethyl acetate, uses and miscellaneous 1330-78-5, Tricresylphosphate 26761-40-0, Di-isodecylphthalate 40766-31-2, 1-Phenyl-1-xylylethane RL: USES (Uses)

(thermal printing transparent layer with solvent from)

IT 1330-78-5, Tricresylphosphate

RL: USES (Uses)

(thermal printing transparent layer with solvent from)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN AN 1988:640562 HCAPLUS

109:240562 DN

Silver halide color photographic material with improved image stability Takahashi, Osamu; Sakai, Minoru; Furusawa, Genichi; Hirano, Tsumoru ΤI

IN

PΑ Fuji Photo Film Co., Ltd., Japan

PCT Int. Appl., 149 pp. CODEN: PIXXD2 SO

 $\mathsf{D}\mathbf{T}$ Patent

LA Japanese

FAN.	CNT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 8800723	A1	19880128	WO 1987-JP492	19870709
	W: AU, JP, US				
	RW: DE, FR, GB,	NL			
	AU 8776910	A1	19880210	AU 1987-76910	19870709
	AU 598574	В2	19900628		
	EP 276319	A1	19880803	EP 1987-904558	19870709
	EP 276319	B1	19941005		
	R: DE, FR, GB,	NL			
	CA 1314750	A1	19930323	CA 1987-541671	19870709
	EP 599808	A1	19940601	EP 1994-100248	19870709
	EP 599808	В1	19981014	•	
	R: DE, FR, GB,	NL			
	JP 2528342	B2	19960828	JP 1987-504201	19870709
	US 5006453	A	19910409	US 1988-181289	19880510
PRAI	JP 1986-162813	A	19860710		
	EP 1987-904558	A3	19870709		
	WO 1987-JP492	Α	19870709		
GI					

II

$$(R_{23})_{m1}$$

NH

S

 $(R_{29})_{m2}$ 
 $(R_{29})_{m3}$ 
 $(R_{28})_{m3}$ 

Ar

The title material comprises a support having ≥1 Ag halide emulsion AB layers containing a fine-particle dispersion which contains ≥1 diffusion-resistant and oil-soluble coupler capable of coupling with the oxidation product of an aromatic primary amine developing agent to form a nondiffusible dye and ≥1 H2O-immiscible coupler solvents having m.p.≤100° and b.p.≥140°. The oil-soluble couplers are represented by (I) [R31 = alkyl, cycloalkyl, aryl, heterocyclyl; R32 = acrylamino, C≥2 alkyl; R33 = H, halo, alkyl, alkoxy; R31 = aryl when R32 is acylamino; and Z31 = H, moiety capable of being released in reaction with the oxidation product of an aromatic primary amine developing agent], (II) [Ar = aryl; R21 = H, acyl, aliphatic or aromatic sulfonyl; R22 = alkyl, aryl, halo, alkoxy, aryloxy, acylamino, imido, sulfonamido, alkoxycarbonyl, carbamoyl, sulfamoyl, alkylthio, sulfonyl; R27 = alkyl, alkoxy, aryloxy; R29 = H, halo, OH, alkyl, alkoxy, aryl,; R28 = amino, acylamino, ureido, alkoxycarbonylamido, imido, sulfonamido, sulfamoyl, alkoxycarbonyl, carbamoyl, acyl, cyano, alkylthio; m1, m2 = 1-4; and m3 = 0, 1-3], and (III) [R24 = H, substituent moiety; Z21 = H, moiety capable of being released on reacting with the oxidation product of an aromatic primary amine developing agent; Z22, Z24 = CR24N, NH; 1 of Z24-Z23 and Z23-Z22 has C-C double bond, and the other has C-C single bond; and when Z23-Z22 has C-C double bond, it may be included in an aromatic ring], and the dispersion of the fine-particles is prepared by emulsifying and dispersing. ICM G03C001-06 IC ICS G03C007-34; G03C007-38 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) ST emulsion dispersion color photog material Photographic emulsions TΤ (color, dispersion, for improved image stability) 117-84-0 **1330-78-5** 2528-40-7 ΙT 3386-33-2 36653-82-4, 1-Hexadecanol 104660-37-9 RL: USES (Uses) (coupler solvent, silver halide color photog. material containing, for improved image stability) 101664-25-9 93951-12-3 107444-89-3 IT 31037-84-0 117827-06-2 RL: USES (Uses) (coupler, silver halide color photog, material containing, for improved image stability) ΙT 9003-63-8 9011-14-7 25034-86-0 25213-39-2 25267-41-8 28549-51-1 117724-98-8 117724-99-9 RL: USES (Uses) (water-insol. and organic solvent-soluble polymer, silver halide color photog. material containing, for improved image stability) ΙT 1330-78-5 RL: USES (Uses) (coupler solvent, silver halide color photog. material containing, for improved image stability) 1330-78-5 HCAPLUS RN

Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

CN

L44 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

ΑN 1988:229491 HCAPLUS

DN 108:229491

TΙ Color image formation

IN Chino, Shigeo; Ohayashi, Keiji; Okumura, Mitsuhiro; Onodera, Kaoru

PA

Konica Co., Japan Jpn. Kokai Tokkyo Koho, 28 pp. SO

CODEN: JKXXAF

DTPatent

LA Japanese

FAN CNT 1

LUM.CMI I				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 62242939	A2	19871023	JP 1986-87490	19860416
JP 06073009	B4	19940914		
PRAI JP 1986-87490		19860416		
GI				

OH OH OH NHCOR<sup>2</sup> R<sup>3</sup> NHCOR<sup>5</sup> 
$$\mathbb{R}^1$$
 CONH  $\mathbb{Z}^1$  II

In effecting color-image formation by imagewise exposing and developing a AΒ Ag halide photog. material obtained by coating a support with a Ag halide emulsion layer in which  $\geq 1$  cyan coupler selected from I [R1 = C2-6 alkyl; R2 = ballast group; Z = H, group releasable on reacting with the oxidized form of a color developer] and II [R3 = H, halo, alkoxy, alkyl, atoms forming a 6-membered ring with R4 (R4 = alkyl, aryl; R5 = alkyl, aryl, NHR6 (R6 = alkyl, aryl); heterocyclyl; Z1 = same as Z in I] are dispersed in a high boiling organic solvent with

dielec. constant ≥6.0, color development is carried out in the presence of ≥1 compound selected from R6R7NOH [R6, R7 = alkyl] or its water-soluble acid salt. High-gradient high-d. cyan images are obtained with good storage stability. ICM G03C007-30 ICS G03C007-34 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) color image cyan coupler photog Photographic emulsions (color, high-gradient high-stability image) Photographic couplers (cyan, for high-gradient high-stability images) 3710-84-7 5725-96-2 13393-61-8 RL: USES (Uses) (color photog. developer solution containing, for high-gradient high-d. images)

IT 84-66-2 84-74-2 93-58-3 **1330-78-5**RL: DEV (Device component use); USES (Uses)

(color photog. film containing, for high-gradient high-d. images)

1T 82684-64-8 90885-01-1 90885-06-6 92589-17-8 93951-12-3 99817-34-2 109904-53-2 111827-48-6 112493-16-0 114807-83-9 RL: TEM (Technical or engineered material use); USES (Uses) (photog. cyan coupler, color film using, for high-gradient high-d. images)

IT 1330-78-5

IC

CC

ST

ΙT

ΙT

IT

RL: DEV (Device component use); USES (Uses) (color photog. film containing, for high-gradient high-d. images)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:140844 HCAPLUS

DN 108:140844

TI Organic solvents for preparation of microencapsulated thermal recording material

IN Usami, Toshimasa; Hatakeyama, Seiji; Shimomura, Akihiro

## . WALKE 10/806451 12/20/04 Page 43

PA Fuji Photo Film Co., Ltd., Japan SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LD English

LA English FAN.CNT 2

FAN.CNT 2				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 247816	A2	19871202	EP 1987-304617	19870522
EP 247816	A3	19890607		
EP 247816	В1	19940413		
R: DE, ES, GB				
JP 63265682	A2	19881102	JP 1987-88197	19870409
JP 07004986	B4	19950125	•	
ES 2054669	Т3	19940816	ES 1987-304617	19870522
US 4840933	Α	19890620	US 1987-53788	19870526
PRAI JP 1986-121875	Α	19860526		
JP 1986-292160	Α	19861208		
JP 1987-88197	Α	19870409		
GI				

$$R_a^1$$
 $R_b^2$ 
 $R_c^3$ 
 $R_d^4$ 
 $R_d^4$ 
 $R_d^2$ 
 $R_d^4$ 
 $R_d^$ 

AB A thermal recording material having excellent transparency and high thermal sensitivity is prepared by mixing colorless basic dye-containing microcapsules with an emulsified dispersion obtained by dissolving at least a color developer in an organic solvent which is slightly soluble or insol. in water and dispersing the solution in an aqueous solution, coating the resulting composition on a support, and drying. The organic solvent has the general formula I (R1 = H or C1-18 alkyl; R2 = C1-18 alkyl; a, b = 1-4 provided that the total number of alkyl groups is ≤4), II (R3 = H or C1-12

alkyl; R4 = C1-12 alkyl; m = 1 or 2; c, d = 1-4 provided that the total number of alkyl groups is  $\leq 4$  in case of m = 1, while it is  $\leq 6$  in case of m = 2), or III (R5, R6 = H or C1-8 alkyl; n = 1-13; e, f = 1-3 provided that the total number of alkyl groups is  $\leq 3$ ). Thus, IV, V, and VI were dissolved in 1-phenyl-1-xylylethane and Et acetate, mixed with aqueous poly(vinyl alc.), H2O, and Na dodecylbenzenesulfonate, and emulsified with high-speed stirring to give a developer dispersion. The developer dispersion was mixed with a dispersion containing microcapsules containing crystal violet lactone, coated on a transparent poly(ethylene terephthalate) support, and dried to give a thermal recording material. The recording material was printed using a facsimile machine to give an image having d. 0.7. The image was projected with an overhead projector.

IC ICM B41M005-26

CC 74-12 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST thermal recording material **org solvent**;
microencapsulated thermal recording material solvent; naphthalene solvent
thermal recording material; biphenylene solvent thermal recording
material; diphenylalkane solvent thermal recording material

IT Printing, nonimpact

(thermal, materials for, containing color developer and microencapsulated leuco dye color former, **organic solvents** for preparation of)

IT 84-74-2, Dibutyl phthalate 102-09-0, Diphenyl carbonate 103-23-1, Dioctyl adipate 103-24-2, Dioctyl azelate 105-75-9 105-76-0, Dibutyl maleate 108-32-7, Propylene carbonate 141-05-9, Diethyl maleate 1330-78-5, Tricresyl phosphate 26761-40-0, Diisodecyl phthalate 40766-31-2, 1-Phenyl-1-xylylethane 86408-13-1 RL: USES (Uses)

(solvent, for preparation of thermal printing materials containing color developer and microencapsulated leuco dye color former)

IT 1330-78-5, Tricresyl phosphate

RL: USES (Uses)

(solvent, for preparation of thermal printing materials containing color developer and microencapsulated leuco dye color former)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)



3 (D1-Me)

```
ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN
L44
AN
     1987:565363 HCAPLUS
DN
     107:165363
ΤI
     Black-and-white photographic material
IN
     Sugimoto, Tadao
PA
     Fuji Photo Film Co., Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 14 pp.
     CODEN: JKXXAF
DΤ
     Patent
LA
     Japanese
FAN.CNT 1
                       KIND DATE
                                                                  DATE
     PATENT NO.
                                          APPLICATION NO.
                                          JP 1985-205717
PΙ
     JP 62065033
                         A2
                                19870324
                                                                   19850918
PRAI JP 1985-205717
                                19850918
     Claimed is a black-and-white photog. material provided with an emulsion
     layer comprising platelet type Ag halide grains and a dispersion
     of a water-insol. composition having a b. p. >150.degree. (760 mmHg)
     and a m. p. <50°, wherein >50% based on the projection area of the
     Ag halide grains have a projection area diameter >0.5~\mu, a thickness <0.3
     \mu, and an aspect ratio >5. Said photog. material shows an improvement
     in the sensitivity-granularity relation.
     ICM G03C001-02
ICS G03C001-06
IC
     74-2 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
     platelet silver halide photog emulsion
ΙT
     Photographic films
     Photographic paper
        (containing oil-dispersed emulsions)
ΙT
     Photographic emulsions
        (oil dispersion-containing)
ΙT
     84-74-2 1330-78-5 1806-54-8 13018-37-6 26761-40-0
     108780-97-8
     RL: TEM (Technical or engineered material use); USES (Uses)
        (silver halide photog. material containing)
IT
     1330-78-5
     RL: TEM (Technical or engineered material use); USES (Uses)
        (silver halide photog. material containing)
RN
     1330-78-5 HCAPLUS
CN
     Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)
```

L44 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1987:468215 HCAPLUS

DN 107:68215

TI Surface protecting liquids for lithographic printing plates

IN Toyama, Tadao; Matsumoto, Hiroshi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	01.1 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 62011692	A2	19870120	JP 1985-151865	19850710
PRAI	JP 1985-151865		19850710		

The title liqs. are emulsions of an organic phase containing surfactants and an aqueous phase containing hydrophilic organic polymer and phosphorylated starch. The liqs. are effective as desensitizing agents and are stable during storage. Thus, 50 parts each of 15% phosphorylated starch and dextrin were dissolved in 740 parts H2O. The solution was added with Na dehydroascorbic acid (preserver), adjusted to pH 3.5 (H3PO4), and emulsified with an organic phase containing dioctyl adipate 15, Na dilaurylsulfosuccinate 27, and sorbitan monooleate 5 parts. The dispersion was used as a surface protecting liquid for lithog. plates.

IC ICM B41N003-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST lithog plate surface protecting liq; starch phosphorylated lithog plate protection

IT Lithographic plates

(with surface protective layer containing surfactant and phosphorylated starch)

IT 99-96-7D, ester 103-23-1, Dioctyladipate 109-43-3, Dibutyl sebacate 1338-43-8, Sorbitan monooleate 4229-35-0, Sodium dilaurylsulfosuccinate 9004-53-9, Dextrin 9005-25-8D, Starch,

51260-76-5 phosphorylated

RL: USES (Uses)

(lithog. plate with surface protective layer containing)

IT 109-43-3, Dibutyl sebacate

RL: USES (Uses)

(lithog. plate with surface protective layer containing)

109-43-3 HCAPLUS RN

Decanedioic acid, dibutyl ester (9CI) (CA INDEX NAME) CN

L44 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1987:166069 HCAPLUS

DN 106:166069

ΤI 3-Aminoallylidenemalononitrile UV-absorbing compounds and photographic elements containing them

IN Vallarino, Angelo

PΑ Minnesota Mining and Manufacturing Co., USA

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 1

L WIA .	CIVI I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 210409	A2	19870204	EP 1986-108314	19860619
	EP 210409	A3	19880817		
	EP 210409	B1	19920819		
	R: BE, CH, DE,	FR, GB	, LI, NL		
	AU 8659490	A1	19870115	AU 1986-59490	19860702
	AU 589650	B2	19891019		
	US 4946768	A	19900807	US 1986-881066	19860702
	CA 1261349	A1	19890926	CA 1986-513080	19860704
	BR 8603244	A	19870224	BR 1986-3244	19860710
	JP 62014149	A2	19870122	JP 1986-163493	19860711
	JP 07119965	B4	19951220		
PRAI	IT 1985-21545	A	19850711		
	_ ^	_			

AΒ A 3-aminoallylidenemalononitrile derivative having the general formula R1RNCH=CHCH=C(CN)2 [I; R = C1-3 alkyl; R1 = (substituted)  $C \ge 10$ alkyl] is used for absorbing UV radiations in the range from 360 to 400 nm, when introduced in a photog. gelatin layer. A solution of methyldodecylamine and acetoanilidoallylidenemalononitrile in EtOH was refluxed to give 3-N-methyl-N-dodecylaminoallylidenemalononitrile (II). II, tricresyl phosphate, di-Bu phthalate, Et acetate, an aqueous gelatin solution, and an aqueous Na alkylnaphthalenesulfonate solution were mixed and stirred to give a dispersion containing fine droplets of II dissolved in organic solvents dispersed in gelatin. The II-containing dispersion was incorporated into an intermediate layer of a photog. material. The photog. material was

exposed and processed to show an optical d. of 0.63 at 382 nm and 0.02 at 415 nm and log E of 19.5 (0.20 optical d. above fog) and 6.8 (1.0 optical

d. above fog). IC ICM C07C121-45

ICS G03C001-92

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) ST aminoallylidenemalononitrile UV absorber photog emulsion IT Photographic films (aminoallylidenemalononitrile derivs. as UV adsorbers) IT Photographic emulsions (aminoallylidenemalononitrile derivs. as UV adsorbers for) 107715-64-0 107715-65-1 107715-66-2 107715-67-3 ΙT 107715-63-9 RL: USES (Uses) (UV adsorber, for photog. materials) ΙT 52658-14-7D, derivative RL: USES (Uses) (aminoallylidenemalononitrile derivative UV adsorber dispersed in combination with, in preparation of photog. materials) ΙT 84-74-2, Dibutylphthalate 141-78-6, Ethylacetate, uses and miscellaneous 1330-78-5, Tricresylphosphate RL: USES (Uses) (organic solvent containing, for desolving aminoallylidenemalononitrile derivative UV adsorber in preparation of photog. materials) ΙT 2439-55-6, N-Methyl-N-octadecylamine 7311-30-0 13417-08-8 35902-57-9 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with acetoanilidoallylidenemalononitrile in preparation of amino allylidenemalononitrile derivative as UV adsorber for photog. materials) 61600-13-3 ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with alkyl amines in preparation of aminoallylidenemalononitrile derivs. at UV adsorbers for photog. materials) ΙT 112-30-1 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with aminoallylidenemalononitrile sarcosine in preparation of allylidenemalononitrile decylsarcosinate as UV adsorber for photog. materials) ΙT 107715-68-4 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with decadecyl alc. in preparation of allylidenemalononitrile decylsarcosinate as UV adsorber for photog. materials) ΙT 1330-78-5, Tricresylphosphate RL: USES (Uses) (organic solvent containing, for desolving aminoallylidenemalononitrile derivative UV adsorber in preparation of photog. materials) RN 1330-78-5 HCAPLUS CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

ΑN 1987:129391 HCAPLUS

DN 106:129391

ΤI Heat-developable photosensitive material

Hira, Hiroyuki; Hara, Hirsohi; Kawata, Ken Fuji Photo Film Co., Ltd., Japan IN

PΑ

Eur. Pat. Appl., 99 pp. SO

CODEN: EPXXDW

DT Patent

LA English LΑ

FAN.CNT 2				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 200011	A1	19861105	EP 1986-104407	19860401
EP 200011	B1	19890913		
R: DE, GB				
JP 61226744	A2	19861008	JP 1985-67308	19850330
JP 61249044	A2	19861106	JP 1985-90089	19850426
JP 05055009	B4	19930816		
PRAI JP 1985-67308	Α	19850330		
JP 1985-90089	Α	19850426		
GI				

MeSO<sub>2</sub>NH 
$$N=N$$

OC<sub>2</sub>H<sub>4</sub>OMe
OH
SO<sub>2</sub>NH

C (Me) <sub>2</sub>CH<sub>2</sub>C (Me) <sub>2</sub>Me
OC<sub>1</sub>6H<sub>3</sub>3

AB A photothermog. material is described providing high d., low fog images even when a small amount of a base precursor is employed. The material contains a photosensitive Ag halide, a reducing agent, a binder and an acetylene Ag compound RC:CAg (R = alkyl, cycloalkyl, alkenyl, alkynyl, aralkyl, aryl, heterocyclyl). Thus, a poly(ethylene terephthalate) film was coated with a composition containing a cubic monodispersed Ag(Cl,Br) emulsion

(Br- 80 mol%, average grain size 0.35  $\mu\text{m})$  15, a gelatin suspension containing 5

Ι

g of magenta dye-providing substance I, 0.5 g succinic acid 2-ethylhexyl ester sulfonic acid Na salt, 10 g tris-iso-nonyl phosphate, 30 mL EtOAc and 100 g 10% aqueous gelatin 25 g, 5% aqueous 4-C9H19C6H4O(CH2CH2O)8H 5, 10% MeOH

solution of benzenesulfonamide 5, 7% aqueous EtOH solution guanidine p-chlorophenylsulfonyl acetate 15, 0.04% MeOH solution of II 4 mL, dispersion of III (prepared by dissolving gelatin 20, 4-acetylaminophenylacetylene 4.6 g in H2O 1 L and EtOH 200 mL at 40°, mixing with a solution of AgNO3 4.5 g in 200 mL H2O, precipitated and freed of excess salts and adjusted to pH 6.3) 10 g, H2O to 100 mL to give 50 µm (wet) layer, dried, overcoated with a protective layer containing gelatin, guanidine p-chlorophenylsulfonyl acetate and a hardening agent, imagewise exposed through a green filter for 1 s at 2,000 lx using W lamp, heated 10 s at 150.degree., contacted with a wetted dye fixing material containing Me acrylate-N,N,N-trimethyl-N-vinylbenzylammonium chloride copolymer mordant and heated 6 s at 80° to provide a magenta image in the fixing material with Dmax 2.38, Dmin 0.13 vs. 1.23 and 0.1 resp. for a control containing Ag benzotriazole emulsion instead of III.

IC ICM G03C001-02

ICS G03C005-54; C07F001-10

CC 74-7 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST silver acetylene compd color photothermog; diffusion transfer photothermog

silver acetylene; heat development photog acetyne silver IT Photothermographic copying (color, diffusion-transfer, acetylene silver compds. for) IT 26027-38-3 69459-11-6 94356-44-2 100906-66-9 106532-55-2 RL: USES (Uses) (photothermog. color diffusion-transfer material containing silver halide emulsion and reducing agent and acetylene silver compound and) ΙT 26027-38-3 86725-92-0 RL: USES (Uses) (photothermog. color diffusion-transfer material containing silver halide emulsion and reducing agent and binder and) **1330-78-5,** Tricresyl phosphate 66710-66-5 TT 92339-50-9 103122-63-0 107019-84-1 107019-86-3 RL: USES (Uses) (photothermog. color diffusion-transfer material containing silver halide emulsion and reducing agent and binder and, acetylene silver compds. for) 23216-67-3 36652-36-5 93054-07-0 ΙT RL: USES (Uses) (photothermog. color diffusion-transfer material containing silver halide emulsions sensitized by) IT 66710-66-5 107019-85-2 RL: USES (Uses) (photothermog. color diffusion-transfer material containing, acetylene silver compds. for) 78630-31-6 107019-81-8 107019-82-9 107019-83-0 ΙT RL: USES (Uses) (photothermog. color transfer material containing silver halide emulsion and reducing agent and binder and) 94939-43-2 98-10-2, Benzenesulfonamide ΙT RL: USES (Uses) (photothermog. material containing silver halide emulsion and acetylene silver compound and) 35447-83-7 ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with silver nitrate, in preparation of dispersion for photothermog. color diffusion-transfer material) ΙT 1330-78-5, Tricresyl phosphate RL: USES (Uses) (photothermog. color diffusion-transfer material containing silver halide emulsion and reducing agent and binder and, acetylene silver compds. RN 1330-78-5 HCAPLUS CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1986:581433 HCAPLUS

DN 105:181433

TI Silver halide color photographic light-sensitive material

IN Kawagishi, Toshio; Nakazyo, Kiyoshi

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 117 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 1

FAN.CNT 1			
PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI EP 170164	A2 19860205	EP 1985-108995	19850718
EP 170164	A3 19860416		
EP 170164	B1 19881005		
R: CH, DE, F	R, GB, IT, LI, NL		
JP 61028948	A2 19860208	JP 1984-150263	19840719
JP 04013699	B4 19920310		
US 122	H1 19860902	US 1985-756617	19850719
PRAI JP 1984-150263	A 19840719		
GI			

$$\begin{array}{c|c}
R^1 & R \\
N & NH \\
Z & R^2 & I
\end{array}$$

Me Cl tert-C5H11 
$$N = \frac{1}{N} + \frac{1$$

AΒ A Ag halide color photog. material is comprised of ≥1 Ag halide emulsion layers containing ≥1 magenta couplers having the general formula I [R = H, or a group capable of being eliminated upon couplingwith an oxidation product of an aromatic primary amine developing agent; R1, R2 = H, a substituent; Z = N, CR3 where R3 = H, a substituent; the magenta coupler may form a dimer or higher polymer at R, R1, R2, or R3] together with ≥1 high-boiling organic solvents having the general formula R4OP(O)(OR5)(OR6)[R4,R5,R6 = alkyl, cycloalkyl, alkenyl, aryl; the total number of C atoms in the groups R4, R5, R6 is 12-60]. The photog. material thus prepared has improved color reproducibility and color image fastness. Thus, II 10 g, Et acetate 25 mL, and III 20 g were mixed and heated to give a solution and the solution dispersed with an aqueous solution (100 mL) containing gelatin 10 and Na dodecylbenzenesulfonate 1 g. The **dispersion** was mixed with a Ag(Br,Cl) emulsion (6.55 g Ag, 50 mol % Br), 2% 2,4-dihydroxy-6-chloro-striazine Na salt 10 mL added, coated on a polyethylene-laminated paper support, exposed through a wedge, developed, bleach-fixed, and washed to give dye images showing improved spectral absorption characteristics as compared to a control using a known pyrazolone coupler without the use of a high-boiling phosphoric ester solvent.

IC ICM G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST pyrazoloazole magenta coupler color photog; phosphoric ester solvent photog coupler

IT Photographic emulsions

(color, containing pyrazoloazole derivative magenta couplers dissolved in high-boiling phosphoric ester solvents)

IT Photographic couplers

(magenta, pyrazoloazole derivs., high-boiling phosphoric ester solvents

```
for)
     93846-14-1
                             101187-00-2 101187-01-3 101187-02-4
ΙT
                  96910-47-3
                                              102731-99-7
     101187-03-5
                  101217-11-2
                                102225-33-2
                                                            103742-14-9
     103742-15-0
                  103742-18-3
                                 103743-68-6
                                              104166-86-1
                                                             104541-48-2
     104541-49-3
                  104561-66-2
                                104660-07-3
                                              104660-08-4
                                                            104660-09-5
     104660-10-8
                  104660-11-9
                                104660-12-0
                                              104660-13-1
                                                            104660-14-2
     104660-15-3
                  104660-16-4
                                104660-17-5
                                              104660-18-6
                                                             104660-19-7
     104660-20-0
                  104660-21-1
                                104660-22-2
                                              104660-23-3
                                                             104660-24-4
     104660-25-5
                  104660-26-6
                                104660-27-7
                                              104660-28-8
                                                             104660-29-9
     104660-30-2
                  104660-31-3
                                104660-32-4
                                              104660-33-5
                                                             104660-34-6
     104660-35-7
                   104660-36-8
                                104844-07-7
                                              104844-09-9
                                                            104844-11-3
     104844-13-5
     RL: TEM (Technical or engineered material use); USES (Uses)
        (magenta photog. coupler, high-boiling phosphoric ester solvents for)
    78-42-2 126-73-8, uses and miscellaneous 682-49-5 919-62-0
IT
     1330-78-5
               1806-54-8 2528-39-4 2528-40-7 4200-55-9
     13018-37-6
                 29420-78-8
                               40585-85-1 56827-95-3
                                                        60285-44-1
                              72386-55-1
                                            90444-40-9
                 69537-42-4
                                                        104660-37-9
     66374-66-1
     104660-38-0
                  104660-39-1
                                104660-40-4
                                              104660-41-5
                                                            104660-42-6
                                104660-45-9
                  104660-44-8
     104660-43-7
    RL: USES (Uses)
        (solvent, for pyrazoloazole derivative magenta photog. couplers for
preparation
       of color photog. emulsions)
TΤ
    1330-78-5
    RL: USES (Uses)
        (solvent, for pyrazoloazole derivative magenta photog. couplers for
preparation
       of color photog. emulsions)
    1330-78-5 HCAPLUS
ŔŊ
CN
    Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)
```



L44 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN AN 1986:139429 HCAPLUS DN 104:139429 TI Radiation image-recording and reproducing method

IN Takahashi, Kenji; Nakamura, Takashi

PA Fuji Photo Film Co., Ltd., Japan SO U.S., 9 pp. CODEN: USXXAM DT Patent LA English FAN.CNT 1 KIND PATENT NO. DATE APPLICATION NO. DATE \_\_\_\_ PΙ US 4535237 Α 19850813 US 1983-560924 19831213 EP 111892 B1 19900711 EP 1983-112595 19831214 R: DE, FR, NL 19821215 PRAI JP 1982-218393 Α A radiation-sensitive panel for the storage and reproduction of radiog. images is comprised of an Eu(2+)-activated Ba fluorobromide phosphor showing a stimulation spectrum in which the emission intensity at the stimulation wavelength of 500 nm is higher than that at the stimulation wavelength of 600 nm. The x-ray image stored in the radiation-sensitive panel is exposed to a stimulating light beam (550-800 nm) to release the stored radiation energy as visible light emission. Thus, BaF2 175.4 and BaBr2.2H2O 336.6 g were mixed, heated at 150.degree. for 2 h to produce BaFBr, dispersed in a 47% HBr solution containing Eu203 0.352 g, dried at 130° under reduced pressure, pulverized, fired at 900° for 2 h in a steam of N containing H 3 weight %, pulverized, and fired again at 600° for 2 h in the same N steam as employed in the 1st firing stage to give an Eu(2+)-activated Ba fluorobromide phosphor having the composition Bal.005FBrl.01:0.001 Eu. A dispersion prepared from the phosphor, nitrocellulose (nitration deg. 11.5%), tricresyl phosphate, BuOH, and EtCOMe was coated on a C black-containing poly(ethylene terephthalate) film, dried at 25-100 $^{\circ}$  to give a 200  $\mu$  dry layer, and laminated with a transparent protective film to give a radiation-sensitive panel. The panel was exposed to an x-ray image of 80 KVp and subsequently scanned with a He-Ne laser beam (wavelength 632.8 nm). The light emitted by the phosphor in the panel was detected and converted to elec. signals by means of a photosensor and finally reproduced by an image reproducing apparatus to obtain a visible image. IC ICM G03C005-16 ICS C09K011-46 NCL 250327200 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) STradiog image storage panel phosphor; barium fluorobromide europium phosphor radiog; radiation image storage panel phosphor ΙT Radiography (radiation-sensitive panel containing europium(2+)-activated barium fluorobromide phosphor for image storage for) ΙT Image conversion (x-ray, radiation-sensitive panel containing europium(2+)-activated barium fluorobromide phosphor for) 16910-54-6, uses and miscellaneous ΙT RL: USES (Uses) (barium fluorobromide phosphor activated with, for radiation-sensitive panel for radiog. image storage) ΙT 21669-04-5 RL: USES (Uses)

(phosphor, europium(2+)-activated, radiation-sensitive panel containing,

(radiation-sensitive panel containing europium(2+)-activated barium

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

for radiog. image storage) 0-78-5 9004-70-0

ΙT

**1330-78-5** 900 RL: USES (Uses)

## WALKE 10/806451 12/20/04 Page 56

fluorobromide phosphor and, for radiog. image storage)

IT 7787-32-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with barium bromide)

IT 10553-31-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with barium fluoride)

IT 1330-78-5

RL: USES (Uses)

(radiation-sensitive panel containing europium(2+)-activated barium fluorobromide phosphor and, for radiog. image storage)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1986:26748 HCAPLUS

DN 104:26748

TI Silver halide photographic papers

IN Yoshida, Tetsuo; Kokubo, Tadayoshi; Adachi, Keiichi; Ikeda, Tadashi; Kobayashi, Hidetoshi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

FAN.CNI I				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 60134232	A2	19850717	JP 1983-242717	19831222
JP 03035651	B4	19910529		
US 4592991	A	19860603	US 1984-684402	19841220
PRAI JP 1983-242717		19831222		
GI				

AB Photog. papers contain, in photog. elements on supports, Ag halide developers and dispersions of oil-soluble fluorescent brighteners dissolved in high-b. organic solvents with a dielec. constant (ε) ≤7.5. The papers provide good background whiteness even when rapidly processed. Thus, 8 g I dissolved in 100 mL II (ε 4.17) and 200 mL EtOAc was mixed with 800 mL 12% aqueous gelatin containing 7 g (based on solids) dodecylbenzenesulfinic acid and stirred with a homogenizer to obtain dispersion, 30 g of which was mixed with 50 g of a Ag(Br,I) emulsion (I 1.2 mol%; cubes with average particle size 0.6 μ; corresponding to 8.5 g AgNO3; gelatin concentration 6%), 100 mL of a 3% aqueous gelatin, 6 mL of a 0.1% MeOH solution of a dye sensitizer, and 1.0 mL of a 0.1% MeOH solution of 1-phenyl-5-mercaptotetrazole to prepare a coating solution Then, 50 mL/m2 of this solution

was coated on a polyethylene paper support and further coated with 30 mL/m2 of a protective layer containing Triton X-200 (surfactant) to obtain a test paper, which was then exposed, developed, and fixed to show a whiteness (with an excitation beam of 400 nm) of 95%, vs. 81% for a control using C11H23C(O)NMe2 ( $\epsilon$  13.45) instead of II.

IC ICM G03C001-42

CC 74-2 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST silver halide photog paper whiteness; oil sol fluorescent brightener photog; brightening agent photog paper whiteness; dielec const low org solvent; org solvent fluorescent brightener photog

IT Photographic paper

(fluorescent brightener incorporation in, using high boiling organic solvents with low dielec. constant)

IT 78-42-2 84-74-2 94-50-8 117-81-7 **1330-78-5** 2315-68-6 2432-90-8 25155-23-1 99660-86-3

RL: USES (Uses)

(in fluorescent brightener incorporation in photog. papers)

IT 7128-64-5 99660-85-2

RL: USES (Uses)

(photog. fluorescent brightener, incorporation of, in photog. papers, high boiling **organic solvents** with low dielec. constant for)

IT 1330-78-5

RL: USES (Uses)

(in fluorescent brightener incorporation in photog. papers)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1986:13139 HCAPLUS

DN 104:13139

TI Radiation image recording and reproducing method

IN Takahashi, Kenji; Nakamura, Takashi

PA Fuji Photo Film Co., Ltd., Japan

SO U.S., 9 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4535238	 A	19850813	US 1983-560815	19831213
JP 05017519	B4	19930309	JP 1982-218394	19821215
EP 111893	B1	19900822	EP 1983-112596	19831214
EP 111893	B2	19941026		
R: DE, FR, NL				
PRAI JP 1982-218394	Α	19821215		

19821213 A radiation image storage panel for use in radiog. is comprised of a support, a radiation-sensitive layer containing an Eu2+-activated Ba fluorobromide phosphor showing a stimulation spectrum in which the emission intensity at the stimulation wavelength of 500 nm is higher than that at the stimulation wavelength of 600 nm, and a transparent protective cover film. The panel is exposed to an x-ray radiation image and then exposed to a stimulating radiation having the wavelength range of 400-500 nm (i.e. an Ar ion laser beam) to release the radiation energy stored in the panel as emitted visible light to reproduce the original radiation image. Thus, BaF2 175.4 and BaBr2.2H2O 336.6 g were mixed and heated at 150 degree. to produce BafBr. A HBr solution (47%) containing Eu2O3 0.352 g was mixed with the BaFBr, dried at 130°, fired at 900° for 2 h in N, and then fired at 600° for 2 h to give a phosphor having the formula Bal.005FBrl.01:0.001Eu. A dispersion prepared from the phosphor, a linear polyester resin, nitrocellulose, tricesyl phosphate, and EtCOMe was coated on a C black-containing poly(ethylene terephthalate) film and laminated with a transparent protective film to give a radiation image panel which stored and reproduced x-ray images with good sensitivity and clarity.

IC ICM G03C005-16 ICS C09K011-46

NCL 250327200

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST radiog panel barium fluorobromide phosphor; radiation image storage panel phosphor; europium barium fluorobromide phosphor radiog

IT Phosphors

(barium fluorobromide, europium(2+)-activated, radiation image storage panel containing)

IT Optical imaging devices

(radiation image storage panel containing europium(2+)-activated barium fluorobromide for)

IT Radiography

(radiation image storage panel containing europium(2+)-activated barium fluorobromide phosphor for)

IT Polyesters, uses and miscellaneous

RL: USES (Uses)

(radiog. radiation image storage panel containing europium(2+)-activated barium fluorobromide phosphor and)

IT 10035-10-6, uses and miscellaneous

RL: USES (Uses)

(in preparation of europium(2+)-activated barium fluorobromide phosphors for radiog. radiation image storage panels)

IT 16910-54-6, uses and miscellaneous

RL: USES (Uses)

(phosphor from barium fluorobromide activated with, for radiation image storage panel for radiog.)

IT 7787-32-8D, solid solns. with barium bromide 10553-31-8D, solid solns. with barium fluoride

RL: USES (Uses)

(phosphor from europium(2+)-activated, radiation image storage panel containing, for radiog.)

IT **1330-78-5** 9004-70-0

RL: USES (Uses)

(radiog. radiation image storage panel containing europium(2+)-activated barium fluorobromide phosphor and)

IT 1330-78-5

RL: USES (Uses)

(radiog. radiation image storage panel containing europium(2+)-activated barium fluorobromide phosphor and)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:561163 HCAPLUS

DN 101:161163

TI Thermally developable color photosensitive material

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

LIMITONI I				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 59088730	A2	19840522	JP 1982-198362	19821112
JP 62060695	B4	19871217		
PRAI JP 1982-198362	•	19821112		
GI				

AB The title material contains, on a support, at least a photosensitive Ag halide, a water-soluble binder, and a dye precursor having formula I (R = OH or group which releases OH by hydrolysis; R1 = pigment or pigment-forming group; R3 = alkyl or aromatic group; R2 = H, alkyl, alkyloxy, halo, acylamino, alkylthio; R2,R3 may form a ring). The material is used in a novel method of color image formation, which consists of exposure to

light, thermal development, and a process of transfer of the dye image to a receptor substrate, providing a clear and stable image. Thus, a **dispersion** of a dye precursor was prepared by homogenizing I (R = OH; R1 = II; R2 = H; R3 = C16H33) 10 g with succinic acid ester of 2-ethylhexyl sodiosulfosuccinate, tricresyl phosphate and cyclohexanone, and then with a gelatin solution A photosensitive Ag(I,Br) emulsion 5, the above dispersion 3.5, guanidine trichloroacetate 0.22 g (in MeOH), and water were mixed and coated on a poly(ethylene terephthalate) support. The obtained photosensitive material was imagewise exposed using a W lamp and developed at 150.degree. for 30 s. The receptor prepared by coating the same support material with a composition containing Me acrylate-N, N, N-trimethyl-N-vinylbenzylammonium chloride (1:1) copolymer 10 g and lime-treated gelatin 100 g was immersed in water, contacted with the developed material with coatings inside, and then separated after 30 min to give a magenta image. G03C001-06; G03C007-00 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) diffusion transfer color photog film Photographic emulsions Photographic films (color, thermally developable diffusion-transfer) 73151-62-9 92340-38-0 22257-44-9 92340-39-1 RL: USES (Uses) (color diffusion transfer photog. emulsion containing, thermally developable) 13047-13-7 RL: USES (Uses) (developing agent, for thermally developable color diffusion transfer photog. film) 108-94-1, uses and miscellaneous RL: USES (Uses) 577-11-7 **1330-78-5** (in dispersing of dye precursor for color diffusion transfer photog. film) 5150-56-1 92340-40-4 RL: USES (Uses) (thermally developable color diffusion transfer photog. emulsion containing) 108-94-1, uses and miscellaneous 1330-78-5 RL: USES (Uses)

(in dispersing of dye precursor for color diffusion transfer photog. film)

RN 108-94-1 HCAPLUS

Cyclohexanone (7CI, 8CI, 9CI) (CA INDEX NAME) CN

ΙT

ΙT

ΙT

ΙT

ΙT

ΙT

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1983:603577 HCAPLUS

DN 99:203577

TI Electrostatographic toner material

IN Naoi, Takashi; Kakimi, Fujio; Mikami, Takeshi

PA Fuji Photo Film Co., Ltd., Japan

SO Ger. Offen., 32 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

-					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
P	PI DE 3245801	A1	19830616	DE 1982-3245801	19821210
	JP 58100856	A2	19830615	JP 1981-198647	19811211
	JP 04016783	B4	19920325		
	GB 2111456	A1	19830706	GB 1982-35094	19821209
	GB 2111456	B2	19850417		
	US 4699866	А	19871013	US 1985-782919	19851001
P	PRAI JP 1981-198647		19811211		
	US 1982-447991		19821208		

AB Pressure-fixable electrostatog. toners are prepared by enveloping a dye-containing core material in an aqueous medium with a polyurethane, polyamide,

polyester, polysulfonamide, or the like by a surface-boundary or an inner polymerization process, spray drying the resultant microcapsules, and then heating at 80-150.degree. for 2-24 h. The heating improves the powder characteristics of the microcapsules. Thus, to a dispersion of C black 3 in di-Bu phthalate 27 g was added an Me2CO-CH2Cl2 (1:3) mixture 10 g followed by a hexamethylene diisocyanate-hexanetriol (3:1) adduct 4 and di-BuSn dilaurate 0.05 g. This mixture was then added to a solution of gum arabic 3 in water 57 g at 20° with stirring to give an oil-in-water emulsion with oil drops having an average diameter of 10-15  $\mu m$ . After cooling the emulsion to <20°, water 100 g of 40° was added, the mixture heated at 90° for 30 min, and then stirred 20 min. at this temperature to complete the encapsulation reaction. After separation and spray drying, the

microcapsules were heated for 24 h at 100° to give a toner in which the particles were sep. from one another and showed no massive agglomerations while unheated microcapsules showed large agglomerations of toner particles. IC G03G009-08 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) pressure fixable microcapsule electrostatog toner; electrophotog toner ST pressure fixable microcapsule Electrography ΙT (developers for, toners for, pressure-fixable microcapsule) ΙT Carbon black, uses and miscellaneous Epoxy resins, uses and miscellaneous Polyamides, uses and miscellaneous Polycarbonates Polyesters, uses and miscellaneous Polysulfonamides Polyureas Rubber, polysulfide Urethane polymers, uses and miscellaneous RL: TEM (Technical or engineered material use); USES (Uses) (electrostatog. toners containing, pressure-fixable microcapsule) TΨ Castor oil RL: USES (Uses) (sulfonated, electrostatog. toners containing, pressure-fixable microcapsule) ΙT Photography, electro-, developers (toners, pressure-fixable microcapsule) 101-68-8 822-06-0D, reaction products with hexanetriol IT 84-74-2 9000-01-5 9002-89-5 25323-24-4D, reaction products 1330-78-5 with hexamethylene diisocyanate 26471-62-5D, reaction products with hexanetriol RL: TEM (Technical or engineered material use); USES (Uses) (electrostatog. toners containing, pressure-fixable microcapsule) IT 1330-78-5 RL: TEM (Technical or engineered material use); USES (Uses) (electrostatog. toners containing, pressure-fixable microcapsule) RN 1330-78-5 HCAPLUS CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1982:482675 HCAPLUS

DN 97:82675

TI Color photographic elements with improved mechanical properties

IN Pannocchia, Mario

PA Minnesota Mining and Manufacturing Co., USA

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 48700	A1	19820331	EP 1981-830161	19810916
	EP 48700	В1	19850206		
•	R: BE, CH, DE,	FR, GB			
	US 4495273	A	19850122	US 1981-298942	19810903
	JP 57084454	A2	19820526	JP 1981-146041	19810916
	JP 02022368	B4	19900518		
PRAI	IT 1980-49692	Α	19800917		
ת ת	7 1 1				

A color photog. material exhibiting low fragility and good adhesion between the emulsion layer and the support contains on the support an auxiliary gelatin layer situated below the emulsion layer. The auxiliary layer has droplets of a H2O-immiscible high boiling org . solvent and an adhesion promoting agent of a vinyl addition polymer latex. Thus, a cellulose triacetate support was coated with an antihalo layer consisting of 2.24 g/m2 of gelatin containing black colloidal Ag 0.2, poly(Et acrylate) (particles 0.05µ dispersed in H2O) 2.11 g/m2 and 12.4 g/m2 of a dispersion containing 2,5-diisooctylhydroquinone 6, di-Bu phthalate 5.25, tri-Ph phosphate 5, EOAc 4.6, aqueous gelatin containing 0.5g of diisooctyl sulfosuccinate 2.4 q, and overcoated by photog. emulsion layers to give a multicolor photog. film which was subjected to a fragility measurements (after being conditioned for 24 h at 20-22s and 20% relative humidity) to show 0% breakage vs. 100% for a control with an antihalo layer consisting of gelatin and colloidal Ag.

CC 74-2 (Radiation Chemistry, Photochemistry, and **Photographic** and Other Reprographic Processes)

ST color photog film fragility redn

IT Photographic films

(color, antihalation layer for, containing fragility reducing agent and adhesion promoting agent)

IT 77-90-7 78-42-2 84-72-0 84-74-2 94-28-0 103-23-1 106-79-6 110-33-8 115-86-6 117-81-7 117-84-0 140-88-5 **1330-78-5** 9003-21-8 9003-49-0 9003-63-8 9003-77-4 26677-77-0 27103-47-5 36561-33-8 53148-31-5 53148-32-6 RL: USES (Uses)

(photog. color film with antihalation layer containing, reduced fragility in)

IT 1330-78-5

RL: USES (Uses)

(photog. color film with antihalation layer containing, reduced fragility in)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1982:464126 HCAPLUS

DN 97:64126

TI Dispersions of photographic addenda

IN Schnoering, Hildegard; Schranz, Karl Wilhelm; Koepke, Guenther

PA Agfa-Gevaert A.-G., Fed. Rep. Ger.

SO Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

r r	MIN. CIVI I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 46247	A1	19820224	EP 1981-106196	19810807
	EP 46247	B1	19830914		
	R: BE, CH, DE,	FR, GB	, IT		
	DE 3031404	A1	19820401	DE 1980-3031404	19800820

```
US 4378425
                                 19830329
                                              US 1981-292234
                                                                      19810812
                           Α
     JP 57078038
                           A2
                                 19820515
                                              JP 1981-128835
                                                                      19810819
PRAI DE 1980-3031404
                                 19800820
                          Α
     Dispersions of organic hydrophobic addenda, such as color formers
     or UV absorbers, in concns. of <70% of dispersed phase, instead
     of the conventional 20%, can be made without use of low-b. solvents, with
     simpler apparatus and less expenditure of energy, by emulsifying the aq
     . phase containing gelatin and an emulsifier in the organic
     phase, both at 50-90°, gradually in a tank with turbine
     agitator, until the viscosity decrease from a maximum indicating the reversal
     of the water-oil to the oil-water type emulsion. The
     preferred particle size is 300-350 nm. Only enough oil former, b.
     >180°, is used as solvent for the coupler or other agent
     to produce a solution pumpable at 50-90°. After passage through an
     emulsifier, the emulsion may be dried or converted to a gel for storage.
     Thus, an oil-water dispersion of 350 nm droplets was
     obtained by dissolving a total of 500 kg of 2 couplers of the
     phenolic type in tricresyl phosphate 400 kg at 140°, and after
     cooling to 80°, adding gradually a 10% aqueous gelatin solution
     520 kg in which at 60° triisopropyl naphthalenesulfonate 22.5 kg
     had been dissolved. The dispersion 67 kg could be added to a photog. Ag halide emulsion 1000 kg at 40° for coating. Or it could
     be diluted with 25% gelatin solution 520 kg at 40° and dried according
     to U.S. 2,801,171 (C\bar{A} 51: 16164a). Or it could be diluted with a solution of
     gelatin 198 and PhOH 12.5 in water 3669 kg and gelled by cooling
     for storage until needed.
IC
     G03C007-26; G03C001-02; B01F003-08
CC
     74-2 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
ST
     emulsification photog coupler; UV absorber photog emulsification
ΙT
     Photographic emulsions
        (addition of couplers and UV absorbers to, emulsification method
        for)
IT
     Photographic couplers
     Photographic stabilizers
        (emulsification of, for addition to photog. emulsions)
ΙT
     Emulsification
        (of photog. addenda)
ΙT
     52762-66-0
                  52762-70-6
                                57233-79-1
                                             62005-65-6
                                                           78897-65-1
     82548-44-5
     RL: PROC (Process)
        (emulsification of, for addition to photog. emulsion)
ΙT
     30143-39-6
     RL: USES (Uses)
        (in emulsification of photog. couplers and UV absorbers, for
        addition to photog. emulsions)
ΙT
     1330-78-5
     RL: USES (Uses)
        (in emulsification of photog. emulsion additives)
ΙT
     1330-78-5
     RL: USES (Uses)
        (in emulsification of photog. emulsion additives)
RN
     1330-78-5 HCAPLUS
     Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)
CN
```

L44 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1982:43830 HCAPLUS

DN 96:43830

TI Color photographic recording material with an emulsified hydrophilic color coupler

IN Nittel, Fritz; Langen, Hans; Ranz, Erwin

PA Agfa-Gevaert A.-G., Fed. Rep. Ger.

SO Ger. Offen., 32 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

PAN. CNI					
PA	ATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE	3002201	A1	19810723	DE 1980-3002201	19800122
EF	2 32699	A1	19810729	EP 1981-100149	19810110
E	2 32699	В1	19821110		
	R: BE, CH, DE,	FR, GB			
US	3 4368259	Α	19830111	US 1981-225383	19810115
JF	56106245	A2	19810824	JP 1981-6020	19810120
CA	A 1155702	A1	19831025	CA 1981-368853	19810120
PRAI DE	1980-3002201		19800122		
GI					

AB Hydrophilic color couplers can be dispersed in photog. emulsions by dissolving the coupler in an organic solvent, such as EtOH, EtOAc, Et2CO3, Me2CO, or mixts. thereof, containing a hydroxyalkylamine, adding the solution to an oil former, adding the resulting solution to an aqueous gelatin solution, and then removing the organic solvent. The resulting dispersions are exceptionally stable and show no increase in viscosity on standing. Thus, cyan coupler (I) was dissolved in a solution containing EtOAc 15 mL, triisopropanolamine

Ι

1.7,
diethyllauramide 3, and a 75% Na dodecylbenzenesulfonate paste 0.2 g.
This solution was then heated to 60° and emulsified in 5% aq
gelatin 40 mL of 40°. After removal of the residual EtOAc in a rotary evaporator, the resulting dispersion was stable for many weeks at 6°.

IC G03C001-74; G03C007-26

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST hydrophilic coupler photog dispersion hydroxyalkylamine

IT Alcohols, uses and miscellaneous RL: USES (Uses)

(amino, in dispersion of hydrophilic photog. couplers)

IT Photographic couplers

(hydrophilic, dispersion of, hydroxyalkyl amines in)

IT 64-17-5, uses and miscellaneous 84-74-2 102-71-6, uses and miscellaneous 105-58-8 122-20-3 141-78-6, uses and miscellaneous 1330-78-5 3352-87-2 10353-86-3 25155-30-0 80103-64-6 80103-65-7 80110-74-3 80110-75-4

RL: USES (Uses)

(in dispersion of hydrophilic photog. couplers)

IT 66096-03-5 80096-83-9 80096-84-0

RL: TEM (Technical or engineered material use); USES (Uses) (photog. coupler, hydrophilic, dispersion of,

hydroxyalkylamine in)

IT 1330-78-5

RL: USES (Uses)

(in dispersion of hydrophilic photog. couplers)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

L44 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1981:217654 HCAPLUS

DN 94:217654

TI Positive and negative working imaging systems from photoactive plastisols

IN McCartin, Peter J.; Nebe, William J.

PA du Pont de Nemours, E. I., and Co., USA

SO U.S., 10 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

111111 0111 1					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 4251618	Α	19810217	US 1978-950307	19781011
	US 4276366	Α	19810630	US 1980-168153	19800714
PRAT	US 1978-950307	ΔЗ	19781011		

АЗ 19/81011 The photoimaging thermally coalescible polymer plastisol dispersion which provides either a pos. imaging element useful as a resist (microcircuits, printing plates, lithog.) or a neg. imaging element useful for color proofing comprises a poly(vinyl chloride) having attached photopolymerizable or photocrosslinkable groups to the backbone, a liquid medium (a plasticizer for the polymer), and a photoactivatable initiator either as a sep. component or as a substituent on the polymer backbone. Thus, a small portion of a plastisol (formed by mixing 5 g vinyl chloride-4-acryloxybenzophenone polymer having particle size 0.5-1.5  $\mu$  with 2.5 g di-Bu phthalate) was coated on Al plate, covered with poly(ethylene terephthalate) film, subjected to pressure of 10,000 lb/in.2 for 1 min, imagewise exposed to Xe lamp radiation for 20 min, heated at 150.degree. for 15 s, developed with THF (after removing the cover film), to give a pos. image of coalesced plastisol composition

IC G03C001-68

NCL 430270000

CC 74-6 (Radiation Chemistry, Photochemistry, and **Photographic** Processes)

ST photoimaging pos neg photoactive plastisol; vinyl chloride polymer photoimaging plastisol

IT Plastics

RL: USES (Uses)

(photosensitive, pos. neg. image forming) ΙT Photoimaging compositions and processes (polymer plastisol dispersion containing modified polyvinyl chloride and plasticizer, neg. and pos. image formation in) ΙT Resists (photo-, neg.-pos. working, polyvinyl chloride based plastisols as) 25086-48-0D, acrylated 77728-70-2 77728-71-3 ΙT RL: USES (Uses) (photoactive plastisol containing, pos. and neg. image formation by) 84-74-2 117-84-0 **1330-78-5** 3524-62-7 25322-68-3 IT RL: USES (Uses) (photoimaging plastisol composition containing modified polyvinyl chloride and, neg. and pos. imaging formation in) ΙT 1330-78-5 RL: USES (Uses) (photoimaging plastisol composition containing modified polyvinyl chloride and, pos. and neg. formation by) ΙT 9002-86-2 RL: USES (Uses) (photoimaging plastisol dispersion containing, neg. and pos. image formation by) IT 1330-78-5 RL: USES (Uses) (photoimaging plastisol composition containing modified polyvinyl chloride and, neg. and pos. imaging formation in) RN 1330-78-5 HCAPLUS CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

3 (D1-Me)

$$\begin{array}{c|c} & O & \\ D1-O-P-O-D1 \\ & & \\ O-D1 \end{array}$$

RL: USES (Uses)
(photoimaging plastisol compn. contg. modified polyvinyl chloride and, pos. and neg. formation by

L44 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN AN 1981:39566 HCAPLUS

DN 94:39566

ΤI Electrorecording sheets for stenciles Nissan Chemical Industries, Ltd., Japan PAJpn. Tokkyo Koho, 3 pp. SO CODEN: JAXXAD DТ Patent LA Japanese FAN.CNT 1 DATE APPLICATION NO. PATENT NO. KIND DATE \_\_\_\_ PΙ JP 55006520 В4 19800216 JP 1975-103699 19750827 PRAI JP 1975-103699 19750827 C16-24 aliphatic saturated nonlinear alcs. or their oxidation product carboxylic acids are added as the softening agent to a coating composition consisting of a resin binder and an elec. conductive powder, and the mixture is coated on a thin porous paper support to give an electrorecording stencil. The use of nonlinear higher alcs. or their oxidation products improves the flexibility and the dispersibility of the elec. conductive powder in the resin binder. Thus, a porous paper support was coated with a composition containing nitrocellulose 7, carbon black 3, di-Bu phthalate 2, iso-PrOH 20, MeOH 150, castor oil 1, saturated monohydric alcs. (C12-16) 4, and saturated nonlinear higher alcs. (C16-18) 20 parts. Then the backside of the paper was coated with a carbon black-poly(methacrylic acid) mixture The electrorecording sheet was then used in an electrorecording machine at 140 V and at 30 mm/min to give a stencil having excellent durability. IC B41M005-24; B41N001-24 74-5 (Radiation Chemistry, Photochemistry, and Photographic CC Processes) ST electrorecording sheet stencil ΙT Carbon black, uses and miscellaneous RL: USES (Uses) (coatings, for electrorecording sheets for stencils) ΙT Stencils (elec. discharge-sensitive paper for) IT Alcohols, uses and miscellaneous Carboxylic acids, uses and miscellaneous RL: USES (Uses) (aliphatic, coatings, for electrorecording sheets for stencils) ΙT 84-74-2 **1330-78-5** 9004-70-0 RL: USES (Uses) (coatings, for electrorecording sheets for stencils) IT 1330-78-5

(coatings, for electrorecording sheets for stencils)

Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

RL: USES (Uses)

1330-78-5 HCAPLUS

RN

CN

ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1980:434977 HCAPLUS

DN 93:34977

ΤI Introducing a photographic additive into hydrophilic colloidal coatings

ΙN Boettcher, Horst; Kroha, Gisela; West, Gerd; Jeschek, Heinz; Plaschnick, Dieter; Sonntag, Hans; Seifert, Arndt; Groeger, Reinhold; Kroha, Walter

PΑ VEB Filmfabrik Wolfen, Ger. Dem. Rep.

SO Ger. Offen., 15 pp. CODEN: GWXXBX

DT Patent

T.A German

FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2827519 PRAI DE 1978-2827519	A1 A	19800117 19780623	DE 1978-2827519	19780623

To obtain layers of maximum sensitivity, sharpness, and graininess, with optimal mech.-phys. properties and grain sizes  $<0.5 \mu$ , without introducing hydrophilizing groups or use of homogenizers, H2O-insol. additives, such as color formers, hardeners, or UV absorbers, are dissolved in a high-b. water-immiscible solvent for mixing with a polymer solution in the presence of low b. solvents and a surfactant, which may be a color former with several SO3H or CO2H groups. The low-b. solvents are removed by distillation or washing, and the remaining dispersion added to an aqueous protective colloid (gelatin) solution Thus, a hydrophobic cyan color former 7 g was dissolved in a mixture of tricresyl phosphate 5, Bu phthalate 5 mL, and a solution of the corresponding hydrophilic cyan coupler 1.5 g in MeOH 100 mL. At  $40^{\circ}$  this solution was stirred into a mixture of an aqueous dispersion of a butadiene-styrene-acrylic acid terpolymer (15 g solids) 80 mL and MeOH 30 mL. After evaporation of the MeOH, the dispersion was stabilized by 10% aqueous gelatin 100 mL. After mixing 6.0 kg of such a dispersion with an AgCl emulsion 5 kg for coating as part of a tricolor material, it was hardened by 300 g of a dispersion of the following type: A triglycidyl hardening agent 150 mg, dissolved in a mixture of Me2CO 30 mL, di-Bu laurylamide 4 mL, and pentadecylsulfonate 1 g, was added at  $60^{\circ}$  to a dispersion 10 mL of an acrylic copolymer 2 g, and readied for use

by distilling off the MeOH. In a tricolor material lower brittleness with less fog and higher gradation were observed, as compared with a product in which a colloid mill was used in preparing the emulsions.

IC G03C001-06; G03C001-74

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST dispersion oleophilic additive photog emulsion

IT Photographic couplers

(introduction of, into photog. emulsions, with high-boiling solvents and polymer dispersions)

IT Acrylic polymers, uses and miscellaneous

RL: USES (Uses)

(oleophilic photog. additive introduction in photog. emulsions in presence of high-boiling solvents and)

IT Photographic emulsions

(oleophilic photog. additive introduction in, with high-boiling solvents and polymer dispersions)

IT 25085-35-2 25085-39-6

RL: USES (Uses)

(oleophilic photog. additive introduction in photog. emulsions in presence of high-boiling solvents and)

IT 67-56-1, uses and miscellaneous 84-74-2 1330-78-5

RL: USES (Uses)

(oleophilic photog. additive introduction in photog. emulsions in presence of polymer **dispersion** and)

IT 1330-78-5

RL: USES (Uses)

(oleophilic photog. additive introduction in photog. emulsions in presence of polymer **dispersion** and)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$

L44 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1975:105175 HCAPLUS

DN 82:105175

TI Composition for treating photographic materials

IN Schellenberg, Matthias; Chylewski, Christoph; Meier, Max

```
PA
     Ciba-Geigy A.-G.
     Ger. Offen., 22 pp.
SO
     CODEN: GWXXBX
DT
     Patent
LA
     German
FAN.CNT 1
                                          APPLICATION NO.
     PATENT NO.
                        KIND
                               DATE
                                                                   DATE
PΙ
     DE 2423541
                         A1
                                19741205
                                          DE 1974-2423541
                                                                  19740515
     CH 576656
                         Α
                                19760615
                                           CH 1973-7061
                                                                  19730517
                        Α
     US 3957516
                                19760518
                                           US 1974-468837
                                                                   19740510
                        A1
     FR 2229995
                                19741213
                                           FR 1974-16624
                                                                   19740514
                        Α
     GB 1462836
                               19770126
                                          GB 1974-21445
                                                                  19740515
                        Α
     IT 1013168
                               19770330
                                           IT 1974-51015
                                                                  19740515
                        A1
     BE 815127
                               19741118
                                          BE 1974-144396
                                                                  19740516
     JP 50020724
                        A2
                               19750305
                                           JP 1974-54605
                                                                  19740517
     US 4014699
                        Α
                               19770329
                                           US 1975-620677
                                                                  19751008
PRAI CH 1973-7061
                        Α
                               19730517
     CH 1974-4917
                        Α
                               19740408
     US 1974-468837
                        A3
                               19740510
     A component which is more soluble in an oily phase than in
AΒ
     H2O is supplied to photog. processing solns. in a 1-10% oil-in-H2O
     emulsion to maintain the concentration of an active ingredient in the solution
at a
     uniform level. The procedure is particularly suitable for replenishing a
     lipophilic diazine catalyst in Ag-dye bleach solns. or supplying an
     antioxidant (dodecylmercaptan, triarylphosphines) to HCHO-free lith type
     or color developers containing SO32-. Suitable oily solvents are tricresyl
     phosphate, di-Bu phthalate, and paraffin oil. Thus, a color developer
     usable for several days was obtained by dissolving triphenylphosphine 2 g
     in tricresyl phosphate 8 ml and dispersing the solution as droplets
     <1\mu in size in H2O to a total volume of 500 ml using a mixture of alkyl
     poly(ethylene oxide) mono- and diphosphates 2.5 g as the emulsifying
            The emulsion was mixed with an equal volume of an aqueous solution
containing
     in 500 ml K2CO3 65, Na2SO3 3, (NH2OH)2.H2SO4 2.5, N-butyl-N-4-sulfobutyl-p-
     phenylenediamine 4, and KBr 0.7 g.
IC
CC
     74-2 (Radiation Chemistry, Photochemistry, and Photographic
    Processes)
ST
    developer photog oil base; processing photog oil base; phosphate tricresyl
     solvent photog
ΙT
    Photographic developers
        (color, oil-based concs. for supplying antioxidants in)
ΙT
     Photographic processing
        (color, silver-dye bleach, oil-based concs. for replenishing diazine
        catalysts for)
ΙT
     Paraffin oils
    RL: USES (Uses)
        (solvent, for photog. additive concs. for color processing)
ΙT
               603-35-0
    112-55-0
    RL: USES (Uses)
        (antioxidant, for color photog. developers, oil-based concs. for
        supplying)
ΙT
    13047-18-2
                 37966-69-1
    RL: CAT (Catalyst use); USES (Uses)
        (catalyst, for photog. silver-dye bleach process, oil-based concs. for
       replenishing)
```

107-66-4 1330-78-5

ΙT

RL: USES (Uses)

(solvent, for photog. additive concs. for color processing)

IT 1330-78-5

RL: USES (Uses)

(solvent, for photog. additive concs. for color processing)

RN 1330-78-5 HCAPLUS

CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)



3 (D1-Me)

L44 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1974:151091 HCAPLUS

DN 80:151091

TI Organic silver carboxylates

IN Ohkubo, Kinji; Masuda, Takao

PA Fuji Photo Film Co., Ltd.

SO Ger. Offen., 39 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN. CNT 1

EMIN	.CNI I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 2322096	A1	19731122	DE 1973-2322096	19730502
	JP 49001511	A2	19740108	JP 1972-43867	19720502
	JP 49011814	A2	19740201	JP 1972-48453	19720516
	FR 2183143	A1	19731214	FR 1973-15685	19730502
	GB 1378734	Α	19741227	GB 1973-20729	19730502
	US 3887597	Α	19750603	US 1973-356560	19730502
PRA	I JP 1972-43867	Α	19720502		
	JP 1972-48453	Α	19720516		

AB Photosensitive Ag carboxylates for use in photothermog. are prepared by reacting Ag+ with RCO2H in presence of Pb++ or Hg++ in a H2O-miscible solvent. Thus, 3.4 g behenic acid in 100 ml tricresyl phosphate (I) was mixed with 100 ml dilute HNO3 (pH = 2) containing 0.1 g Hg(NO3)2 and 100 ml. NH4OH (pH = 11) containing 1.7 g AgNO3, and reacted until the **H2O** and I **phases** were separated, 4.0 g Ag behenate (II) (0.1  $\mu$  in size) was collected from the I phase after adding 400 ml MeOH. A coating composition consisting of 40 ml of a solution prepared from 5 g II and 4 g

poly(vinylbutyral) dispersed in 400 m (Me)2CHOH, 1 ml of a solution containing 0.6 g ZnBr2 and 0.9 g ZnI21 in 20 ml MeOH, 1 ml 0.2% benzoxazolidenethiohydantoin solution in Me2CO, 8 ml 25% 2,2'-methylenebis(6tert-butyl-4-methyl-phenol) in Me2CO, and 8 ml 10% phthalaquinone in Me Cellosolve was coated on a polyester support, exposed through a negative to W lamp radiation and heated at 120° for 30 sec to give a clear pos. image. A control using Ag behenate not prepared in the presence of AgNO3 showed inferior image resolution and Dmax. IC C07C CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes) ST silver carboxylate photothermog ΙT Photothermography (silver carboxylate manufacture for, light-sensitive) ΙT Carboxylic acids, compounds RL: USES (Uses) (silver salts, manufacture of light-sensitive, for photothermog.) ΙT 2489-05-6P 18268-45-6P RL: PREP (Preparation) (manufacture of, in presence in lead and mercury salts for photothermog.) ΙT 24402-87-7 RL: USES (Uses) (photosensitizer, photothermog. copying compns. containing silver laurate and) 10139-47-6 IT 119-47-1 7699-45-8 RL: USES (Uses) (photothermog. copying compns. containing silver behenate and) IΤ 92-69-3 150-76-5 12124-97-9 RL: USES (Uses) (photothermog. copying compns. containing silver laurate and) ΙT 112-85-6 143-07-7, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with silver nitrate, in presence of lead and mercury salts) 123-86-4 TT 108-88-3, uses and miscellaneous 301-04-2 **1330-78-5** 1600-27-7 10045-94-0 10099-74-8 18917-82-3 25510-11-6 RL: USES (Uses) (silver carboxylate manufacture in presence of, for photothermog.) ΙT 119-39-1 RL: USES (Uses) (toner, for photothermog. copying compns.) ΙT 7761-88-8, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (with carboxylic acids, in presence of lead and mercury salts) ΙT 1330-78-5 RL: USES (Uses) (silver carboxylate manufacture in presence of, for photothermoq.) 1330-78-5 HCAPLUS RN CN Phosphoric acid, tris(methylphenyl) ester (9CI) (CA INDEX NAME)

$$3 (D1-Me)$$